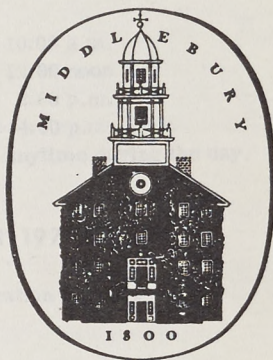


MIDDLEBURY COLLEGE BULLETIN



REGISTRATION
CATALOGUE ISSUE

Winter and Spring Terms 1973

MIDDLEBURY COLLEGE - MIDDLEBURY, VERMONT

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REGISTRATION INFORMATION

WINTER AND SPRING TERMS 1972-73

Simultaneous registration will be held for Winter and Spring Terms 1972-73. Students may pick up Registration Materials from November 28 to December 4, 1972 in the Registrar's Office and should consult Faculty Advisers during that period.

REGISTRATION DATE: Tuesday, December 5, 1972, 8:00 a.m. to 4:00 p.m. in McCullough Gym

Class of 1973 -- 8:00 a.m. to 10:00 a.m.

Class of 1974 -- 10:00 a.m. to 12:00 noon

Class of 1975 -- 12:00 noon to 2:00 p.m.

Class of 1976 -- 2:00 p.m. to 4:00 p.m.

Graduate and Special Students may register anytime during the day.

WINTER TERM REGISTRATION 1972-73

REGISTRATION MATERIALS: Winter Term Registration Card 72-73

INSTRUCTIONS:

1. In consultation with your Adviser, list five (5) courses in order of preference, and have your card signed by your Adviser. Be sure to list the correct course numbers. (See sample below.)
2. If you are taking a 500 series course you should complete only the first choice on your Registration Card, and obtain the signatures of both your Adviser and the Chairman of the Department (see 4. under Independent Work).
3. If you are taking a 600 series course (Internship or Independent Winter Project)
 - a. Your project must be approved by the Curriculum Committee prior to the registration period.
 - b. You must obtain the signatures of both your Adviser and the Dean of Students on your registration card before you register in McCullough Gym.
 - c. You should complete only the first choice on your registration card.
 - d. See 1. and 2. under Independent Work.
4. If you are taking a 700 series course you should complete only the first choice on your registration card, and obtain the signature of your Adviser. See 3. under Independent Work.
5. You must hand in a Winter Term Registration Card upon entering McCullough Gym, whether or not you are taking a Winter Term program.

WINTER TERM REGISTRATION CARD 72-73

ASSIGNED CHOICE →

STUDENT NAME

M 74 13002

W
I
N
T
E
R

Choice	Dept.	Course Number	Catalogue Title
1st	AL	18.3	Robert Frost: The Major Themes
2nd	AR	21.3	Creative Process
3rd	ED	41.3	Dreams
4th	PA	66.3	Metaphysics
5th	ID	05.3	The Works of Time

INSTRUCTIONS: Students must return this card
to Registrar with completed registration forms

E. L. Pool

ADVISOR APPROVAL

INDEPENDENT WORK:

1. Independent Winter Projects: Students who register for Independent Winter Projects (i.e., projects similar to a 500 project during the Fall or Spring) are to designate their studies by the course number 600, preceded by the name of the department in which they are pursuing it, and succeeded by the title "Independent Winter Project". (For example: English 600, Independent Winter Project.)
2. Winter Internships: Students who register for Winter Internships are to designate their choice by the number 600, preceded by IN, and succeeded by the title "Internship". (For example: IN 600, Internship.)
3. Senior Independent Study: Students beginning or continuing Senior Independent Study (usually a Senior thesis or independent reading in preparation for comprehensive examinations) are to designate their study by the course number 700, preceded by the name of the department in which they are pursuing it, and succeeded by the title "Senior Independent Study". (For example: Psychology 700, Senior Independent Study.)
4. Honors: Seniors beginning or continuing Honors work are to designate their studies by the course number 500, preceded by the name of the department in which they are pursuing it, and succeeded by the title "Honors". (For example: Physics 500, Honors.)

PRIORITIES FOR REGISTRATION:

Since most Winter courses are conducted wholly or partly as seminars, there may not be space in every course for every student who wishes to take it. For this reason, the Winter Term Registration Card has place for five courses.

Hopefully, this year few students will have to take third, fourth or fifth choices. But since there will not be time for supplementary registration, all students--except those registering for Independent Winter Projects, Internships, Senior Independent Study, or Honors work--must offer five choices.

Students who have received permission to pursue Independent Winter Projects or Internships may register for courses instead once they have seen the Catalogue. They will then be admitted to courses according to the system of priorities used for all students wishing to take courses.

The College Curriculum Committee composed of Faculty members, students and administrators, has developed the following system of priorities for Winter Registration in order to maximize the number of students who receive their first choice. Students will first be assigned to courses by class and on the basis of their first-choice. (In other words, Senior first-choices first; Junior first-choices second, etc.) Thereafter, students will be assigned on the basis of their second, third, fourth and fifth choices. (In other words, Senior second-choices, third-choices, fourth-choices, fifth-choices; then Junior second-choices, third-choices, fourth-choices, fifth-choices, etc.)

As soon as possible the Registrar will inform each student of the course to which he has been admitted by posting class rosters in Proctor Hall, the Library and the Registrar's office.

COURSE CHANGES:

Course changes may be made -- where space in the desired course is available -- through Wednesday, January 3, the first day of Winter classes.

PHYSICAL EDUCATION REGISTRATION 1972-73

Registration for Winter Term Physical Education courses will be held at the Office in McCullough Gymnasium from 9:00 - 12:00 and 1:00 - 4:00 on November 27, 28, and 29. Class assignment lists will be posted in McCullough by December 5 and any conflicts resulting from the students' academic registration on December 5 must be settled prior to December 14 at the Office in McCullough. Winter Term Physical Education begins on January 3. (See Spring Term section of catalogue for Physical Education registrations for Winter II and Spring Seasons.)

SPRING TERM REGISTRATION 1972-73

REGISTRATION MATERIALS:

Spring Term Registration Card 72-73
Course Schedule Card (STUDENT)
Student Activity Card
Class Schedule (COURSES)

INSTRUCTIONS:

1. Spring Term Registration Card 72-73 (see sample below)
 - a. Prior to registration, and in consultation with your Adviser, list four (4) courses, plus non-credit Military Science if elected. Have courses requiring "permission" signed by the instructor.
 - b. Obtain your Adviser's signature.
 - c. If you are taking a 500 series course, you must obtain the signatures of both the instructor and the Chairman of the Department.
 - d. If you are registering for fewer or more than four courses, you must obtain the signature of a Dean.
 - e. MAJOR: Members of the class of 1976 will find "Freshman" printed in the major box. They do not select a major during registration for Winter and Spring terms. All other students must declare a major. If the major box is blank, the student should select a major from the list of official majors given in Part 2. Print the official name of your major in the major box, and write "S" in type box. (If you chose the Biology-Chemistry major from this list, write "J" in type box.) If you are enrolled in a Joint Major or a Double Major, follow the instructions outlined in the section below the list in Part 2. All other students should check the major box to see that the proper major is recorded. If entry is not correct, cross out the incorrect major, and obtain a "Major Change Form" (available at the Registrar's Office). This must be completed and returned to the Registrar before registration is complete.
 - f. ADVISER: Members of the class of 1976 will find their Freshman Adviser's name in this box. If the adviser box is blank, students should have their Major Adviser print his name in this box, and sign on the line immediately below this box. All other students: your adviser's name will be printed in the adviser box. If a change is necessary, the proper form must be obtained from the Registrar's Office, completed, and returned to the Registrar.

SPRING TERM REGISTRATION CARD 72-73

STUDENT NAME M 74 13002

INDICATE MAJOR

CHEMISTRY

TYPE

S

S
P
R
I
N
G

Course No.	Instructor's Signature if a Permission Course
CH 992.	
CH 500	R W. Allesen
EC 150A	
AL 302.	

Types of Majors

Single - S

Double - D

Joint - J

If you chose a D or J Major, consult the
current Registration Catalog for instructions

ADVISOR

E. L. POOL

E. L. Pool

Advisor Approval

If you have registered for fewer, or
more, than four credit-courses you
must obtain the signature of a Dean

Dean's Approval

2. Official Majors:

American Literature	Chemistry
American Studies (History)	Classics
American Studies (Literature)	Drama (English)
Art	Economics
Biology	English
Biology-Chemistry	Environmental Studies (Biology)
Environmental Studies (Chemistry)	Music
Environmental Studies (Geography)	Philosophy
Environmental Studies (Geology)	Physics
Environmental Studies (Physics)	Political Science
French	Psychology
Geography	Religion
Geology	Russian
German	Sociology-Anthropology
History	Spanish
Italian	
Mathematics	

Joint Major: The Biology-Chemistry major (listed above) is a Joint Major, and the registration card must be signed by two advisers, one from each department. Other Joint Majors are programs that combine portions of two of the disciplines in the above list, arranged on an individual basis with the cooperation and approval of the departments concerned. These majors may be indicated on the registration card only after the required program is approved by both advisers, and is on file with the Registrar. These majors should be recorded on the registration card by listing both of the departments involved (e.g. History-English), and writing "J" in type box. The card must be signed by two advisers, one from each department.

Double Major: A program in which the student fulfills the complete major requirements of two departments. These majors should be recorded on the registration card by listing both departments involved (e.g. Art-Music), and writing "D" in type box. The card must be signed by two advisers, one from each department.

3. Student Activity Card:

- a. Complete this card, bringing it up to date with your previous and present activities.

4. Registration Procedure:

- a. Report to McCullough Gym with your registration materials on Tuesday, December 5th, at the designated hour for your class.
- b. Hand in your Winter Term Registration Card on entering McCullough Gym.
- c. Stop at each table corresponding to the departments in which you wish to enroll. The departmental representatives will give you course cards and indicate the course numbers on your Course Schedule Card. Go to single section courses first.
- d. When you have obtained a course card for each course in which you have been authorized to enroll, hand in your materials at the Check-Out table. Your registration is completed.
- e. At the end of Winter Term your course schedule will be in your Proctor Hall Post Office Box.

5. Drop and Add Card Instructions: (see sample below)

- a. After you have officially registered, all changes in courses or sections must be recorded in the Registrar's office on Change Course Forms.
- b. Use only ONE card to make a course drop and an add.
- c. Fill in the required information in the areas provided: Class, Student Number, Student Name (listing Last Name first), the course you are dropping (with section when appropriate), and the course you are adding (with section when appropriate).
- d. Obtain the signatures of both your adviser and the instructor of the course you are adding.
- e. Return the completed card to the Registrar's Office on or before the end of the two week period that follows the first day of classes.
- f. After the two week period is over, ALL drop and add cards must be approved, in writing, by a Dean plus the other necessary signatures. No verbal permission of course changes will be accepted.

77

Class

13002

Student No.

STUDENT Name (last name first)

Student Name

INSTRUCTIONS: Complete only one card for each Dropped and Added course. Print your name, class and student number in the space provided, as well as the designation of both the dropped and added course. Obtain the signatures of your Advisor and the "Added Course" Instructor.
Return this card to the Registrar's Office

DROP → EC 150A
Course No.

E. L. Pool
Advisor's Signature

ADD → GN102B
Course No.

K. Sparks
Instructor's Signature (Added Course)

6. Late Registration:

There is a \$25 fine for failing to register on the date specified unless excused by the Dean of Students.

WINTER TERM 1973 CATALOGUE

INTRODUCTION

The Winter Term offers students and members of the Faculty unique opportunities for study. Each student enrolls in only one course; each instructor teaches only one. Both are in positions to venture into areas of study new to them. The Faculty is bound only to give courses not given during either of the longer terms. Though a course may be offered in successive years, each year it must be introduced and approved anew. Students may study at the College or away from it, independently or as participants in a course, in their major fields or in disciplines they have never studied before. Also, a student has the opportunity to undertake a Winter Internship instead of a formal study. Winter Term exchange arrangements have been established with Lincoln University, Berea College, Bucknell University, Massachusetts Institute of Technology, Case Western Reserve University, and St. Olaf's College.

Courses are offered in all of the departments at both introductory and advanced levels and on topics which may receive little or no attention during the Spring and Fall. Individual instructors teach most of the courses; two or three instructors jointly teach many others. Of the latter sort, many span the concerns of more than one department and bring to bear on their subjects the knowledge and skills of men and women trained in different fields. Thus the Winter Term offers a distinctly interdepartmental group of courses as well as courses in each department. Finally, the Winter Term gives students the opportunity to suggest courses they would like the Faculty to teach, or, where they have demonstrated outstanding abilities, to teach courses themselves under the supervision of a member of the Faculty.

In designing the Winter Term, the Faculty has sought to encourage adventurousness. It, therefore, stipulated that a department could require its students to take no more than two of its Winter offerings during four years, that a student may not pursue his Freshman and Sophomore Winter studies in the same department, and that over four years a student may take no more than three Winters in one department. There is no limit to the number of Interdepartmental courses a student may take. If a student takes an Interdepartmental course during his Freshman year, he may, as a Sophomore, take either another Interdepartmental course or any regular departmental course.

WINTER GRADING SYSTEM

In order that members of the Faculty might offer courses not suited to letter grading and that students might be encouraged to study subjects unfamiliar to them, Winter courses and Independent Projects are graded as Pass, Fail, or Honors. In Winter courses which would lend themselves to the letter grading system, Pass is equivalent to a grade of C- or more. Winter Internships are not graded. If a student fails to meet the responsibilities attendant on Internship, he will receive no credit for the Winter Term and will have to make up the credit in a manner approved by the Curriculum Committee. For purposes of graduation, academic standing, probation, and other appropriate concerns, receiving credit for an Internship will be equivalent to a Pass grade and failure to receive credit shall be equivalent to a Fail.

Students who fail Winter courses, Independent Winter Projects, or Internships will be placed on probation and required to undertake studies, approved by the Curriculum Committee. Appropriate work in a summer school is frequently accepted. Failure in this work will normally result in dismissal from the College.

Continuing work, such as a thesis, Honor project, or Senior Independent Study, which is either begun, continued, or completed during the Winter Term, will be graded under the letter system when the work has been completed. Prior to that time the work will receive an "In Progress" grade of Satisfactory or Unsatisfactory.

All other Winter work must be completed by the end of the Winter Term. Grades of Incomplete will be submitted according to the usual procedures, and students receiving such grades must complete their work satisfactorily by the end of the Spring Term immediately following.

WINTER INTERNSHIPS

Winter Internships are designed to permit students to gain practical experience in significant areas of professional or service activity on or off campus.

Internships must be sponsored by a member of the College Faculty or staff who is qualified to judge whether the proposed Internship is of sufficient scope to be of value and to assess the results of the Internship experience. In addition to a campus sponsor, the student must have a written confirmation of his project from an on-site supervisor who is willing to write an assessment of the student's work as an Intern. At the end of the Internship, the student, his on-campus sponsor, and his on-site supervisor must submit evaluation reports to Dean Turner, Chairman of the Curriculum Committee.

Students who take more than one Internship during the four years should elect internships in substantially different fields.

AUDITING

The Faculty encourages students to audit Winter courses. Instructors will accommodate as many auditors as the nature of their courses and the facilities available to them permit. To audit a course students need only obtain the permission of the instructor-in-charge.

INTRODUCTORY FOREIGN LANGUAGE PROGRAMS

Foreign language courses, numbered 101 during the Fall Term, will continue during the Winter Term. Each student, currently taking such a course, who expects to enroll in 102 in the Spring must arrange a schedule for a continuing language program during the Winter Term. Students are to make these arrangements with their current language instructors at class meetings during the week of December 4 through 8.

Final examinations in language courses, continued during the Winter, will require no preparation beyond that given at weekly drills and laboratory sessions. Grades in continuing language programs will be incorporated into Spring grades in those courses.

Students who continue their studies of an introductory foreign language during the Winter must also pursue a Winter course or Independent Winter Project. Students enrolled in two beginning language courses which continue during Winter Term will not be required to enroll in a regular Winter Term course; in this case arrangements should be made through the Dean of Students.

PHYSICAL EDUCATION PROGRAM

For complete program description, see Spring Term section of this Registration Catalogue. Winter Program Term instructional courses will include the following: badminton, beginning ice skating, bowling, conditioning, gymnastics, ice figure skating, karate, modern dance, riding lessons, scuba, ski lessons, ski touring, beginning swimming, and weight training. There will be fees for riding, skiing, and karate lessons. Specific information will be available at the time of registration (November 27, 28, and 29 at the McCullough Office).

WINTER LECTURE SERIES

There will be a regularly scheduled series of lectures during the Winter Term. The topics of these lectures will vary from the academic to the sublime, and will bear no evident relation to one another. The Faculty hopes that students as well as instructors, either individually or as panels, will participate in this Series. Students wishing to speak should make arrangements through Professor Peterson.

BOARD REBATES

Students who study off-campus for two weeks or more during the Winter Term are entitled to rebates of part of their board charges. Students wishing rebates should see Dean Wonnacott by December 5.

CLASSES

The Winter Term will begin on Wednesday, January 3. Due to the brevity of the Term and the infrequent meetings of many courses, it is imperative that each student attend his first class. At the first meeting of each course, students will be given a schedule of subsequent classes.

The following courses are offered in Winter Term, 1973. They are arranged according to department, with the single exception that Interdepartmental courses are listed at the beginning and cross-referenced with the departments of the instructors giving them.

The courses are numbered consecutively from 01.3 to 88.3 and should be registered for accordingly. (Only independent work -- 500, 600, and 700 -- does not have a decimal point.)

INTERDEPARTMENTAL

ID 01.3 Architectural Form and Structure

Mr. Andres and Mr. Winkler

The goal of this course is to trace the development of architectural structure by studying the materials that have been available and the limitations imposed by them. Elementary stress analysis and the behavior of various materials under stress will be presented theoretically and through laboratory modeling. There will be critical discussions of contemporary structures and systems -- e.g. reinforced concrete, tension structures, inflatables -- as well as historical presentations of famous engineering feats such as the dome of the Pantheon in Rome and the vaults of the gothic cathedrals. The buildings and systems will be tested in the laboratory to see what really makes them work -- luck or the laws of physics. As a final project each student will model a major architectural work and investigate it from technical and aesthetic viewpoints. Some knowledge of basic statics (e.g. from PH 109, PH 101, or high school physics) will be helpful but is not required.

Method of Instruction: Lecture, discussion and laboratory

Limit on Enrollment: 40

ID 02.3 A Study of Homer's Iliad

Mr. Armstrong and Mr. Littlefield

A reading of the Iliad with attention to the technique and the art of the poet who is both singer and storyteller.

A prior reading of the Iliad and the Odyssey is desirable but not necessary.

Method of Instruction: Seminar

Limit on Enrollment: 20

ID 03.3 Experimental Modes in Recent Fiction

Mr. Buckeye

A study of the use of the medium in seven works: Gass (Omensetter's Luck), Grass (Tin Drum), Hawkes (Cannibal), Mailer (Why Are We in Vietnam?), Metcalf (Genoa), Robbe-Grillet (Project for a Revolution in New York), Trocchi (Cain's Book).

Alternative choices: Lowry (Under the Volcano), Pynchon (Crying of Lot 49), Wurlitzer (Flats). Paper.

Recommended for those who have course or equivalent experience of narrative fiction.

Method of Instruction: Discussion and Lecture

Limit on Enrollment: 40

ID 04.3 Middlebury through the Printed Page

Mr. Chase

An opportunity for a small group of students to come to grips intensively with the factors that shape the production of a piece of printed matter: audience, editorial content, graphics, budget. A 'hands-on' experience, using as an example the creation, from the ground up, of a 'viewbook' for potential applicants to Middlebury. Interested students are urged to consult with the instructor before registration.

Method of Instruction: Workshop

Limit on Enrollment: 12

ID 05.3 The Works of Time

Mr. Claudon and Mr. Stone

We will study Nineteenth-century American horology from three vantage points: 1) The technological history of American clocks and clock-makers. 2) The actual clock cases, dial faces and their painted decoration as relating to styles in furniture and painting. 3) Clock restoration, involving dismantling and repair of clock cases and works. The course will culminate in an exhibition of American clocks in the Johnson Gallery at the beginning of Spring term. Preparation for the exhibition will entail writing a catalogue suitable for publication as well as collecting and organizing the display items.

Method of Instruction: Seminar-Laboratory

Limit on Enrollment: 20

ID 06.3 Africa in Fiction

Mr. Jobe '73 (Mr. Knox sponsor)

Close comparative study of novels by African, English and American writers in which sub-Saharan Africa figures as setting and/or theme. Special attention will be given to such "problems" as cultural shock and cultural blindness, local color, symbolism and didacticism. The novels will be chosen from works by Achebe, Bellow, Camara, Cary, Oulougem, Soyinka and Tutuola.

Method of Instruction: Seminar

Limit on Enrollment: 20

ID 07.3 The German Lied of the Nineteenth and early
Twentieth Centuries

Mr. Kurtzman and members
of the German Dept.

A study of German Lieder by Beethoven, Schubert, Schumann, Brahms, Wolf, Schoenberg and Webern. Particular attention will be paid to settings of poems by Goethe, Tieck, Heine, Eichendorff, Mörike and George. Poetic structure, style and meaning will be compared with the structure, style and meaning of the music to determine in what ways they correspond and differ.

Primary objective of the course is to discover how well or how poorly composers understand their texts and whether or not the musical composition is a contribution to the poetry, a distortion of it, or a completely separate art form in its own right. A knowledge of German is not required, as translations of the texts will be provided.

Method of Instruction: Seminar

Limit on Enrollment: 20

ID 08.3 College Law

Mr. O'Brien

In *Middlebury College v. Chandler*, 16 Vt. 683 (1844) the Supreme Court of the State denied a college claim for tuition on the ground that the defendant as a minor could not contract for college education. The judge ruled that while a minor can validly contract for necessities, higher education was "an ornament of civilization and a benefaction of the law". This course aims to derive a general view of the role of education in American Society from the legal tradition surrounding college actions and practices. A general review of College law will be succeeded by detailed studies of case law in such areas as administrative due process, faculty and student rights and obligations under contract, the status of the College as a charitable corporation and its relation as corporate entity to the political life of the nation.

Method of Instruction: Discussion

Limit on Enrollment: 20

ID 09.3 Women, Power, and Politics

Ms. Peters and Ms. Schneider

The course will examine the roles women have and have had in society and their relationship to the political and economic structures of those societies. In addition to studying past societies and present American society, we will look at some projections of possible future ones. The readings will include those of Charlotte Perkins Gilman, John Stuart Mill, Friedrich Engels, Margaret Benson, Kate Millet, Shulamith Firestone, and Juliet Mitchell.

Method of Instruction: Discussion with paper or project

Limit on Enrollment: 40

ID 10.3 Philosophy in Literature: The Absurd Man

Ms. Rifelj

Camus' *Myth of Sisyphus* will function as a point of departure for the study of alienation as a philosophic and structural theme in modern fiction. Readings will include Kafka's *Metamorphosis*, Hesse's *Steppenwolf*, Camus' "The Stone Which Grows," and Heller's *Catch-22*. Students will be asked to select another work for individual analysis. Taught in English.

Method of Instruction: Seminar

Limit on Enrollment: 20

ID 11.3 Landmarks of Contemporary Science

Mr. Roberts

During the last twenty years (essentially in the lifetime of Middlebury students) many discoveries have been made in the realm of science and technology which have exerted a profound influence on our lives today. Immediately the transistor, the laser, and the structure of DNA come to mind but there are many others. It is the purpose of this course to examine the principles and functions of these landmark discoveries, the background from which they arose, and to trace their development and their influence on our lives today. Some "crystal-ball gazing" will also be encouraged.

Method of Instruction: Seminar

Limit on Enrollment: 40

ID 12.3 Sociology of Science and its Role in Society (or
Good, thy Name is Science?)

Mr. Schuh

The course will examine some of the past accomplishments of science and their impact on society. The present relevance of science and its projected future role will be considered. Questions such as the following will be discussed:

To what extent should the federal government control and support scientific research? Should man control the fate of science or science determine the fate of man?

Method of Instruction: Lectures, discussions, student presentations

Limit on Enrollment: 40

ID 13.3 The European Avant-Garde since 1909

Mr. Shattuck

In the 19th and early 20th centuries, the avant-garde represented the most dynamic and creative force in literature and the arts. Has the artistic avant-garde been engaged during the past few decades in destroying art, the very concept and activity that gave it life? The course will begin with some intensive history, take up several specific cases of men and movements, and work toward the contemporary scene. Students should have a reasonable background in art and literature. At least one museum-gallery trip will be arranged.

Method of Instruction: Lectures and discussions

Limit on Enrollment: 30

ID 14.3 Synchrony and Diachrony

Mr. Sparks

An investigation of the nations of sequence and simultaneity in human affairs. The major readings for the course will be in Fraser's The Voices of

Time, a set of some thirty essays subtitled "a cooperative survey of man's views of time as expressed by the sciences and the humanities." The course will be a search for conscious and unconscious metaphors for time, particularly as these occur in modern literature. The final common reading will be Thomas Mann's self-conscious essay on the perception of time: The Magic Mountain. Individual projects will be supported by additional readings.

Method of Instruction: Seminar

Limit on Enrollment: 12

ID 15.3 Teaching Laboratory Science to Pre-College Students

Mr. Watters

Persons preparing to teach at either the primary or secondary school levels often find themselves ill-prepared to formulate ways in which students can experience and investigate phenomena scientifically. During the course of the term we plan to examine different approaches to such phenomena, with emphasis on biology. For example, practical problems that require scientific solutions provide an excellent vehicle for teaching basic science, but also demonstrate the place of science in society. Sources of experimental material, and methods, and various commercial laboratory outlines will be evaluated. Course participants will devise original, or revise existing, laboratory "units". Emphasis will be given to working within the confines of a minimal budget. Strongly recommended for students in elementary or secondary education who are planning to teach science. Fulfills science requirement for elementary certification.

Method of Instruction: Seminar and Laboratory

Limit on Enrollment: 30

Prerequisite: A basic College-level science course. Those planning to elect the course should consult with the instructor.

ID 16.3 The Natural and Unnatural History of the New World

Mr. Woodin and Mr. Beck

An investigation into the effect various plants and animals have had on the history and well-being of man since his earliest time. Various species have been the impetus behind exploration, the cause of martial conflict, symbols for religions, the basis for great economic upheavals and the materia medica for curing a vast array of ills both real and imaginary. Considerable folklore substantiates, perpetuates and enhances these relationships and effects. Students will choose one organism and research its effect on mankind through the libraries of science, anthropology, economics, history, religion, literature and folklore, limiting their investigations to the peoples of Europe and the Americas. (Grading on basis of term paper, student discussions and presentations.)

Method of Instruction: Lectures, research and student reports

Limit on Enrollment: 20

AMERICAN LITERATURE

AL 17.3 The American Indian as Author and Subject Mr. Beck

A study of writings by American Indians and the use made of American Indian culture by other writers. Works by such writers as Longfellow, Cooper, Guthrie, colonial Indian writers, and modern Indian writers (e.g., Momaday in House of Dawn) will be read and discussed.

Method of Instruction: Lecture

Limit on Enrollment: 30

AL 18.3 Robert Frost: The Major Themes Mr. Munford

An examination of Complete Poems to discover the 'constellations of intention' in groups of related poems throughout the body of Frost's work. The examination will start with A Boy's Will and proceed to each succeeding volume in the order of its initial publication.

Method of Instruction: Discussions, occasional lectures, term paper

Limit on Enrollment: 20

AL 19.3 The Novels of Ernest Hemingway Mr. Stitt

A study of Hemingway's novels in chronological order, paying attention to the development of both his style and his thought. A substantial paper, dealing with at least three of the novels, will be due at the end of the Term.

Method of Instruction: Lecture

Limit on Enrollment: 40

See also: INTERDEPARTMENTAL 06.3 Africa in Fiction Mr. Jobe '73

(Mr. Knox Sponsor)

16.3 The Natural and Unnatural History of the
New World Mr. Woodin and Mr. Beck

ART

AR 20.3 Contemporary Photographic Vision

Mr. Atwater '73
(Mr. Turner Sponsor)

An examination of contemporary photographic expression with an emphasis on exploring the reality of the photographic experience. Through a study of major contemporary photographers (Weston, White, Uelsmann, Michals, etc.) the reality of photographic experience, the actual recording of a definite spatial image in a specific temporal interval, will be used to explore classical photography, multiple imagery, manipulated prints, and sequential images.

Method of Instruction: Slide lectures, discussion, movies, and darkroom sessions. In response to weekly lectures students will be expected to present their own photographs in conjunction with topics covered. A portfolio of 15-30 mounted prints will be due at the end of the term.

Limit on Enrollment: 10

Prerequisites: Access to College Darkroom. (Students who do not already have keys will be expected to purchase them.) Students supply their own camera, paper, and film.

AR 21.3 Creative Process

Mr. Cooney

This studio course will be offered only to freshmen. The student will choose his materials from either acrylics, oils, water colors or related mediums (to be discussed). There will be initial experimentation in traditional or contemporary directions. Emphasis will be upon the use of the material to its fullest advantage, as well as stress upon the individual's search for strong visual expression. Students will be urged to explore the comparative advantages and limitations of various media.

Method of Instruction: Studio

Limit on Enrollment: 20 freshmen

AR 22.3 From English tombs to the Gates of Hell: problems in 18th and 19th century European sculpture

Mr. Hunisak

A consideration of selected problems in the history and evolution of European sculpture from the death of Bernini up to and including the career of Rodin.

Method of Instruction: Lectures and seminar

Limit on Enrollment: 20

AR 23.3 Sculpture

Mr. Markhoff

Experimental design and fabrication of wooden objects. Exploitation of formal, spatial and expressive qualities, using raw wood, common lumber and relating materials. Survey and analysis of primitive, traditional and contemporary use of wood.

Method of Instruction: Studio

Limit on Enrollment: 20

See also: INTERDEPARTMENTAL 01.3 Architectural Form and Structure

Mr. Andrew and Mr. Winkler

05.3 The Works of Time

Mr. Claudon and Mr. Stone

13.3 The European Avant-Garde since 1909

Mr. Shattuck

BIOLOGY

BI 24.3 The Ecology of Continuous Cultures

Mr. Bell

Continuous cultures of microorganisms can be used to construct and analyze a variety of ecological systems under steady-state conditions. This course will begin with an examination of the theory underlying continuous culture, and then proceed to examine how the theory can be applied to such diverse subjects as mutation, waste treatment, mutualism, and nutrient limitation under natural conditions. Highlight of the course will be the construction of a chemostat by each student and an analysis of data obtained by the apparatus.

Method of Instruction: Informal lectures, seminars, laboratory work. A research report will be required.

Limit on Enrollment: 10

Prerequisites: BI 110 plus some grounding in math and in chemistry; this course is not recommended for freshmen who have not had at least CH 101.

BI 25.3 The Biology of Parasites (Wee Beasties - or Why I don't go South for my Vacation)

Mr. Fischer

This course, designed for the non-science student, will attempt to present the general biology of selected medically important parasites, especially those that have influenced the course of human history. Stress will be placed on epidemiology, i.e., the relationships of the various factors which determine the intensity, frequency, and distribution of parasitic diseases. Each student will give a seminar presentation on some aspect of parasitism that interests him (or her).

Method of Instruction: Lectures and seminars

Limit on Enrollment: 40

- BI 26.3 Practical Things You Always Wanted to Know about Plants
but were Afraid (or didn't know enough) to Ask

Mr. Greenwood

The economic and social impact of plants on man. Lectures will include such topics as the biology of Dutch Elm disease, the biology and social impact of potato blight (on both the U.S. and Ireland), development of better crop species (the Green Revolution), paper making (a field trip to a paper mill will be arranged), the sugar maple industry in Vermont, and others (like the biochemistry of the derivatives of good old *Cannabis sativa* L.). A paper on a topic of the student's own choosing, but related to the social and economic impact of a particular plant on man, and which shows that the student has learned some basic biology, will be required.

Method of Instruction: Lecture, discussion, field trips, written paper

Limit on Enrollment: 25

Prerequisites: High school biology recommended

- BI 27.3 Protein Synthesis

Miss Tepperman

This course will examine the mechanism of protein biosynthesis in prokaryotes, eukaryotes and cell organelles. It will cover the details of the reactions, the structure and assembly of ribosomes in vivo, and the regulation of protein synthesis at the translational and transcriptional levels. The material will be presented from the point of view of experimental basis for existing theories.

Method of Instruction: Seminars, discussion

Limit on Enrollment: 40

Prerequisite: BI 314

- See also: INTERDEPARTMENTAL 15.3 Teaching Laboratory Science to Pre-College Students Mr. Watters
16.3 The Natural and Unnatural History of the New World Mr. Woodin and Mr. Beck

CHEMISTRY

CH 28.3 Research Techniques in Organic Chemistry

Mr. Gleason

Students will be introduced to a number of research techniques that are important in organic chemistry, and gain practical experience with such instruments as infrared, nuclear magnetic resonance and ultraviolet spectrometers, the gas chromatograph and the differential scanning colorimeter. A number of short term experiments will constitute the core of the course with assigned supplementary readings.

Method of Instruction: Lecture and laboratory

Limit on Enrollment: 40

Prerequisite: CH 242

CH 29.3 Glassblowing

Mr. Harnest

A practical course in the art of blowing glass in the construction of glass apparatus for science projects. The laboratory experience will start with mastering the simplest operation of joining two pieces of glass tubing of the same diameter (straight joint) and progress to increasingly sophisticated joints, hopefully including the difficult ring and Dewar (thermos bottle) seals. Instrumentation experience will include use of glassblowing lathe.

Method of Instruction: Lecture, demonstration and laboratory

Limit on Enrollment: 10

CH 30.3 Orbital Symmetry: The Chemists Sockdologer

Mr. Ledlie

An introduction to the application of orbital symmetry to problems in organic chemistry will be given. The rules of orbital symmetry formulated in the 1960's by Roald Hoffmann and Nobel Laureate R. B. Woodward correlate a plethora of seemingly unrelated chemical reactions (e.g. nucleophilic displacement reactions, the Diels Alden reaction, etc.). The theories developed are perhaps the most important contribution to organic chemistry of this century. Students will become acquainted with simple Hückel theory, perturbation theory and frontier molecular orbital theory.

Method of Instruction: Lecture-seminar

Limit on Enrollment: 40

Prerequisite: CH 241

CH 31.3 Principles of Chemistry

Mr. Pool

The course will provide a broad background in general chemical principles including atomic structure, chemical bonding, the states of matter, stoichiometry, the kinetic theory of gases and the states of matter. It will serve as a prerequisite for CH 131, CH 211 and CH 241.

Method of Instruction: Lecture, problem drill and possibly some laboratory.

Limit on Enrollment: 40

See also: INTERDEPARTMENTAL 11.3 Landmarks of Contemporary Science

Mr. Roberts

12.3 Sociology of Science and its Role in
Society

Mr. Schuh

CLASSICS

CL 32.3 Racial Prejudice in Ancient Rome

Miss Heibges

The course will explore the nature and underlying reasons for racial, ethnic, social and religious prejudice in ancient Rome as manifested in writers from Plautus (ca. 251-184 B.C.) to Tacitus (ca. 55-116 A.D.).

A knowledge of Latin, though helpful, will not be required.

Method of Instruction: Seminar

Limit on Enrollment: 40

See also: INTERDEPARTMENTAL 02.3 A Study of Homer's *Iliad*

Mr. Armstrong and

Mr. Littlefield

ECONOMICS

EC 33.3 The Art of Collective Bargaining

Mr. Waters

An introduction to the practice of collective bargaining. The course will survey current practices and constraints in collective bargaining. It will provide students an opportunity to become official "negotiators" and to arrive at a "contract."

Method of Instruction: Lecture, practical bargaining sessions, strategy meetings and final written contract

Limit on Enrollment: 24

EC 34.3 The Limits to Economic Growth

Mr. Wolff

An examination of a current controversy over the future course of the American and other economies.

Method of Instruction: Seminar

Limit on Enrollment: 25

See also: INTERDEPARTMENTAL 05.3 The Works of Time Mr. Claudon and
Mr. Stone

09.3 Women, Power, and Politics

Ms. Peters and Ms Schneider

ENGLISH AND DRAMA

ED 35.3 Victorian Arts and Letters from Pre-Raphaelitism
to Decadence

Mr. Cabot

A study of the art and literature of a varied and lively group. The major figures are Ruskin, Morris, Swinburne, Wilde and the early Yeats. Others to be studied are the Rossettis, Hunt, Millais, Brown, Whistler, Pater, Beardsley, Thompson, Johnson, Dowson. The approach will be a blend of criticism, art history, history, and above all, interest in the numerous controversies provoked by this famous infamous crowd.

Method of Instruction: Seminar

Limit on Enrollment: 20

ED 36.3 Writing Short Fiction

Mr. Clagett

A writing and discussion course. In the first week will have lectures on the art of short fiction, plus careful analysis of short stories in an anthology. The class will meet daily during this time for two hours. The students will write during the second week. The third week will be devoted to the reading and discussion of student work. The fourth week again is devoted to writing. The final days of the term will be used to read and discuss the outstanding productions of the class. Designed for Freshmen and Sophomores, for students who do not yet wish to devote a term to creative writing, but who could benefit from a winter term of experimentation. Satisfies Freshman Writing Program requirement.

Method of Instruction: Lecture, discussion, performance

Limit on Enrollment: 30

ED 37.3 King Arthur's Progress or The Great Bear's Rise
to Stardom

Mr. Halpern

A comparative survey of Arthurian materials from Geoffrey Monmouth's History of the Kings of Britain to Lerner and Lowe's Camelot. Readings from Chretien de Troyes, the French Vulgate romances, Malory, Spenser, Tennyson, Twain, and T.H. White. The vicissitudes of Arthur's career have been determined by what different writers at different times have needed him to be. Our focus will be on each work as a product of its age and on the historical development of the legend as an indicator of cultural change.

Method of Instruction: Seminar discussion

Limit on Enrollment: 20

ED 38.3 Oral Interpretation of Literature

Mr. Honeyman '73

(Mr. Prickitt sponsor)

"It seems reasonable to suppose that insofar as a poem (novel or drama) is an expression of feeling, or perhaps a complex of attitudes, the reader must reproduce this feeling, whether he is reading silently or aloud, if he is to maintain seriously that he understands it. ...Roughly, we must understand a text if we are to know how it should be expressed or performed, but we must know how the text is expressed in order to understand it truly." ...Don Geiger, Berkeley

This course will attempt to improve the student's ability to communicate through the medium of oral interpretation, both for his own enjoyment and understanding and that of an audience. Students will read Shakespearean scenes, some Chaucer, some Greek drama, modern poetry, and a wide variety of literature (Thurber, Carroll perhaps) to gain experience in different forms of interpretation. No previous experience in oral interpretation or in theater is expected. All students will participate in a public performance near the end of the term.

Method of Instruction: Discussions and individual and group rehearsals

Limit on Enrollment: 12

ED 39.3 Freedom Within Bondage or How to Succeed at
Marriage by Eschewing Politics

Mr. Pack

The course will involve close literary analysis of poems and stories that deal with the question of what order lovers can create by making vows.

Primary Reading: Frost--Selected poems; Chaucer--The Wife of Bath's Prologue and Tale; Shakespeare--Othello; Milton--Paradise Lost, Books IX & X; Joyce--The Dead; Singer--Gimpel the Fool; Cheever--The Country Husband; Barth--Chimera; Stevens--Selected poems.

Secondary Reading: De Rougemont--Love in the Western World; Hunt--The Natural History of Love

Method of Instruction: Seminar

Limit on Enrollment: 20

ED 40.3 Miracles and Everyman - Design and Production Mr. Potter

Planning and execution of setting, props, costumes and lighting for production of Miracles and Everyman. Calls during first three weeks will normally be afternoons, Monday through Friday.

Interested students see Mr. Potter before registration.

Opportunities for advanced work in design and production planning for students who wish to start before Christmas vacation.

Method of Instruction: Studio, workshop, performance

Limit on Enrollment: 20

ED 41.3 Dreams Mr. Price

The course will attempt to investigate the nature and "meaning" of dreams. Texts will include Freud's Interpretation of Dreams, Ernest Jones' On the Nightmare, and Erich Fromm's The Forgotten Language, supplemented by more contemporary works by Gutheil, Hall and others. Each student will keep a daily journal of dreams as personally remembered, related by another person, drawn from literary sources, or simply invented, and the class will discuss these dreams in terms of the various theories and speculations offered in the texts.

Method of Instruction: Seminar

Limit on Enrollment: 20

ED 42.3 Thomas Hardy: A Study of the Major Novels Mr. Prickitt

After a week's reading and discussion (with the help of Robert Pack) of representative poems, the class will examine in detail The Return of the Native, The Mayor of Casterbridge, Tess of the d'Urbervilles, and Jude the Obscure. Each member of the class will read and report on one other novel of Hardy.

Method of Instruction: Discussion

Limit on Enrollment: 20

ED 43.3 The Marx Brothers Mr. Teush

A close critical analysis of seven major films by the Marx Brothers (The Cocoanuts, Monkey Business, Horse Feathers, Duck Soup, A Night at the Opera, A Day at the Races, At the Circus) in order to define the character and structure of their aggressive play.

Method of Instruction: Lecture, discussion, screening

Limit on Enrollment: 40

ED 44.3 Production Seminar: Miracles and Everyman Mr. Volkert

Study and performance of the Medieval Everyman and a select group of Miracle plays.

Procedure: Study of plays and acting workshop Monday through Friday, 9:30-11:30 A.M.

Rehearsals, 7:00 to 10:00 P.M. Monday through Thursday and one rehearsal on Sunday afternoon or evening. Performances January 30, 31 and February 1.

Texts: A.C. Cawley, ed. Everyman and Medieval Miracle Plays; mimeographed plays.

References: Grotowski, Jerzy: Towards a Poor Theatre, Spolin, Viola: Improvisation for the Theatre.

Method of Instruction: Workshop, rehearsals

Limit on Enrollment: 30

See also: INTERDEPARTMENTAL 02.3 A Study of Homer's Iliad

Mr. Armstrong and

Mr. Littlefield

03.3 Experimental Modes in Recent Fiction

Mr. Buckeye

06.3 Africa in Fiction Mr. Jobe '73

(Mr. Knox Sponsor)

09.3 Women, Power, and Politics

Ms. Peters and Ms. Schneider

FRENCH

FR 45.3 Introduction to the "Chanson Poétique"

Mr. Simon

Study of some well-known works of contemporary French poets and composers from the points of view of poetic creation, political and social involvement, and popular entertainment. Among those studied will be: Aragon, Brassens, Brel, Ferrat and Léo Ferré.

The course will be taught in French.

Method of Instruction: Seminar

Limit on Enrollment: 20

A methodical study of the transformation of language (French and English) from a tool of mere communication to a literary instrument: words and their aesthetic value, clichés, word order and phrase structure, intensification of expression, distortions, and ironical mechanisms. Stylistics is thus understood in the modern meaning of objective analysis of literary style, not as advanced composition.

Explications de textes may be given in French or English. (A reading knowledge of French is required.)

Method of Instruction: Seminar

Limit on Enrollment: 20

See also: INTERDEPARTMENTAL 06.3 Africa in Fiction Mr. Jobe '73

(Mr. Knox Sponsor)

10.3 Philosophy in Literature: The Absurd Man

Ms. Rifelj

13.3 The European Avant-Garde since 1909

Mr. Shattuck

GEOGRAPHY

GG 47.3 Montreal: The Planning of a Metropolis

Mr. Hovinen

An examination of the problems and prospects of Greater Montreal. Students will investigate the metropolitan area's economic, political, ethnic, and environmental problems and the plans of city and metropolitan planning agencies for combatting those problems. The course will include a field trip to Montreal and a visit with public planners.

Method of Instruction: Seminar, field trip

Limit on Enrollment: 30

GG 48.3 Civilization and Environment in the American Tropics

Mr. Malmström

An examination of the environmental settings in which the pre-Columbian civilizations of Middle America arose. Comparative field studies of the core areas of the Old and New Empires of the Maya (Guatemala and Yucatan) and of the Aztecs and their predecessors (Valley of Mexico). An evaluation of the challenges posed to ancient and modern land-use practices in the study areas.

Method of Instruction: Field trip, preceded by selective readings and concluded with a research paper.

Limit on Enrollment: 10

Prerequisites: GG 101, or permission. Some knowledge of Spanish desirable

Fee: \$450 (estimated) per person

GEOLOGY

GG 49.3 Man and Energy

Mr. Baldwin

Man uses fossil and nuclear fuels at an ever-increasing rate. Has he unleashed a monster or has he finally released Pandora's last gift? This course is designed to clarify the question. Through films and workshops, the participants will study the geologic occurrence of oil and gas, coal, uranium, thorium and geothermal energy. Meanwhile, each participant will present a report each week on some facet of the topic, whether on geology, geographic distribution, technology, economics, or law. These will aid the participant in preparing a final paper of broader scope.

By pooling efforts, we should acquire data on reserves, consumption, and distribution of energy sources. We should be able to assess the potential of technologic solutions in extending reserves and reducing hazards. Hopefully, we should come to recognize the main implications of man's use of energy.

Method of Instruction: Films, workshops, reports, final paper

Limit on Enrollment: 40

GG 50.3 X-rays and Earth's materials

Mr. Creasy

The student will learn how to operate the X-ray diffraction and fluorescence equipment and will gain practical experience in its use by analyzing rock and mineral samples. The results will form part of a continuing research program concerning the evolution of the White Mountains of New Hampshire. Lectures will develop all necessary background for our research and therefore no special knowledge of X-rays, chemistry or geology is necessary.

Method of Instruction: Laboratory and lecture

Limit on Enrollment: 40

GG 51.3 Lake Champlain from 12,000 B.C. to the Present

Mr. Folger

A survey of geological and historical literature to establish the chronology of events that have most affected the physiography of Lake Champlain and its surrounding valley since the retreat of the last major glacier. Lectures, discussion, and research will concern geology, climate, and man's interaction with the region through industry, agriculture, and war.

Method of Instruction: Lecture, seminar and research

Limit on Enrollment: 40

GERMAN

GN 52.3 German: a total environment

Miss Driver

German is not just a "foreign" language, but rather the expression of a somewhat "foreign" environment. The class will attempt to recreate this environment within the Middlebury setting, with the aid of films, tapes, TV, short dramatic productions, talks and entertainment by visiting German guests. The course is designed for students interested not only in perfecting their German, but for those interested in studying the relationship between language and cultural behavior.

Method of Instruction: Seminar, laboratory

Limit on Enrollment: 25

See also: INTERDEPARTMENTAL 07.3 The German Lied Mr. Kurtzman and members of the German Dept.
14.3 Synchrony and Diachrony Mr. Sparks

HISTORY

HI 53.3 Stephen Vincent Benet's John Brown's Body and The Civil War:

A Dramatic Reading and Historical Analysis

Mr. Catton

Half of the course will be devoted to rehearsals, work on set, lighting, etc., culminating in a dramatic reading to be presented to the College in live performance during the last week of the winter term. The other half will consist of biweekly discussions of Benet's book in connection with other histories and monographs pertaining to the Civil War, in an effort to evaluate the historical reliability and value of his work.

(The actual script, adapted from Benet, is now being prepared by two senior history majors in connection with their HI 700 requirement. They will assist in directing the performance.)

Method of Instruction: Rehearsals in morning, seminar in afternoon

Limit on Enrollment: 15

HI 54.3 Oral History Workshop

Mr. Holmes

Simulated experience in the collection and evaluation of oral historical data dealing with African ethnohistory. The actual raw data collected by the instructor during a period of field study in Kenya as well as primary written source materials will be used. Students will become involved in interviewing one another, at times filling the roles of interviewers and at other times being trained as "African" interviewees. They will then learn techniques of evaluating the information collected during the interview.

Method of Instruction: Simulated interview, special study, and discussion

Limit on Enrollment: 20

HI 55.3 The Quest for Utopia

Miss Lamberti

An historical study of utopian thought based on the premise that utopias are more than misguided visions. The class will read some major utopian writers in England and France from the sixteenth century to modern times. Some questions that will be considered are: What is the nature of the utopian imagination? Out of what historical situations do utopias arise? Why are some individuals driven to make eschatological prophecies and to draw blueprints of new societies? To what extent are utopias psychological documents revealing the sensibility of the particular historical societies in which they appear? How have utopias changed in history, in the era after the French Revolution of 1789, in the century of the Machine, Freud, and Auschwitz?

Method of Instruction: Seminar discussion

Limit on Enrollment: 20

HI 56.3 Soviet Literature of Dissent

Mr. Pereira

Major works of leading Soviet dissidents (including Pasternak, Solzhenytsyn, Mandelstam, Medvedev, among others) will be examined with a view to understanding both the particular and the universal dilemma of intellectual autonomy in a closed society.

Method of Instruction: Seminar

Limit on Enrollment: 20

HI 57.3 Henry VIII and Thomas Cromwell

Mr. Tillinghast

Henry VIII's reign brought profound change to England. It is sometimes held that Henry was himself responsible; sometimes that Cromwell was the organizing brain. The key decade is that from 1520-30, which will be investigated in some detail.

Method of Instruction: Seminar

Limit on Enrollment: 20

MATHEMATICS

MA 58.3 Elementary BASIC Programming and Computer Concepts

Mr. Ballou and Mr. Bielli

For students with no previous programming experience. The elementary aspects of the BASIC language illustrated by exercises to be programmed and run on the teletypes.

Method of Instruction: Lecture and discussion

Limit on Enrollment: 30

MA 59.3 Abstract Algebra II

Mr. Carruth

Fields and field extensions. Galois Theory. Finite Fields. Valuation Theory and an introduction to algebraic number theory. Chain conditions and Noetherian rings.

Method of Instruction: Seminar

Limit on Enrollment: 20

Prerequisite: MA 302

MA 60.3 Writing Calculus Textbooks

Mr. Olinick

This course will have two major aims. The first is to develop the student's ability to write expository mathematics. The second is to examine critically the presentation of the major concepts of calculus in a number of standard textbooks. A series of daily written assignments focused on specialized topics will precede and attempt to produce a chapter-length development of one of the principal ideas of calculus. We will analyze a number of published texts reflecting radically different philosophies about the teaching of calculus. In addition to emphasizing textual material, we will consider the writing of "problems" and "discussion questions." Satisfies Freshman Writing Program requirement.

Method of Instruction: Seminar

Limit on Enrollment: 10

Prerequisite: Completion (successful or otherwise) of a course in calculus

MUSIC

MU 61.3 Musical Improvisation

Mr. Harris

The course is intended to lead students who have previously studied an instrument to the point of being able to create new material spontaneously at performance tempo without detailed score.

Method of Instruction: Daily workshops

Limit on Enrollment: 10

Prerequisite: Audition or recommendation of Music Department

MU 62.3 The Technique of Jazz Improvisation

Mr. Robert Hutton '74
(Mr. Fanning sponsor)

A student-led colloquium designed to teach the theory and fundamental techniques of jazz improvisation at three levels: beginning, intermediate, and advanced. Intensive ensemble rehearsal and individual practice required. Culminates in a concert performance at the end of winter term. Those planning to elect the course should see Mr. Hutton.

Method of Instruction: Seminar

Limit on Enrollment: 20

MU 63.3 Analysis of Present-Day Rock Music

Mr. Robert Lefsetz '74
(Mr. Fanning and
Mr. Kurtzman sponsors)

A thorough investigation of the musical, sociological, historical, and economic elements of today's rock music. Performers to be discussed include the Rolling Stones, Alice Cooper, Frank Zappa, the Beach Boys, and Jackson Browne.

Method of Instruction: Lecture-discussion

Limit on Enrollment: 20

MU 64.3 The Age of Recordings and All That Jazz

Mr. Stires

Focal point of the course will be the history of jazz from ragtime through the rise and fall of the big bands to present day folk and rock. With the advent of the disc, music becomes a product packaged for mass distribution. Course will examine the interplay between music and society as they are seduced by the advances of recording technology and the resulting accessibility of all sorts of music. Particular emphasis will be given to the impact of the recording industry upon musical performance, the expectations of listeners, and the changing assumptions of composers.

Method of Instruction: Lecture, discussion

Limit on Enrollment: 40

See also: INTERDEPARTMENTAL 07.3 The German Lied Mr. Kurtzman and members of the German Dept.

PHILOSOPHY

PA 65.3 Philosophical Problems concerning Perception Mr. Bigelow

We all suppose that we gain our knowledge of the world through sense-perception. This course will discuss two questions: a) how is sense-perception to be analysed, i.e., what is involved in it? b) how far are our claims to know justified by perception as thus analysed? Traditional views in this field have recently been denied; hence there is a debate to be considered.

The general topic will be explored more fully than is possible in regular term courses. The course will be run so as to satisfy the needs of two types of students: 1) those without any previous philosophy who would like to enter the field with a fairly thorough examination of one important problem area, rather than with a survey of half a dozen as is done in the usual introductory course; 2) those already somewhat advanced philosophically.

Note: This course may be of interest to psychology students. However, this is philosophy, not psychology, though the latter is not irrelevant to the subject under discussion.

Method of Instruction: Seminar: informal combination of lecture and discussion, with class reports on readings

Limit on Enrollment: 25

PA 66.3 Metaphysics Mr. Nuovo

An inquiry into the theory of being as being, of what it is to be anything whatever. The course will consist of a critical reading of selected texts from Aristotle, Thomas Aquinas, and Spinoza. This course is not recommended to students who have no background in philosophy.

Method of Instruction: Seminar

Limit on Enrollment: 20

PA 67.3 Gödel's Incompleteness Theorem Mr. Temin

The first Incompleteness Theorem states that in any axiomatization of arithmetic sufficient for proving arithmetical truths of the sort normally encountered there will be sentences such that neither they nor their negations will be provable. Therefore, it seems, for any such axiomatization of arithmetic there will be arithmetical truths not provable in that axiomatization. Gödel's original paper proving the theorem will be studied in detail. If time permits, further results in this area will be discussed. No previous knowledge of mathematical logic will be assumed, but those who have not taken PA 218 should have a considerable mathematical background. Consult the instructor for further information.

Method of Instruction: Lecture

Limit on Enrollment: 40

See also: INTERDEPARTMENTAL 08.3 College Law Mr. O'Brien

PHYSICAL EDUCATION AND ATHLETICS

PE 68.3 Production Workshop in Dance Teaching

Miss Gulick

A course designed to interest and encourage students to dance and to enjoy teaching Dance to children and teenagers.

The course will have daily technique classes, each for one hour, will have three hours of classes in choreography each week, and scheduled opportunities to teach Dance to children and teenagers. Books on the teaching of dance in the college library will be used, and films on teaching of dance to children will be rented and shown.

The course will culminate with a program.

Method of Instruction: Technique classes, choreography classes, seminar

Limit on Enrollment: 15

PHYSICS

PH 69.3 Cryogenics

Mr. Terwilliger

The term cryogenics refers to the production and use of very low temperatures, from -150°F to absolute zero at -459.67°F . This course will survey current methods of producing low temperatures, and applications of cryogenic techniques to such diverse areas as freeze drying of foods, cryobiology and cryosurgery, superconducting power lines, low temperature physics research, and cryonics (suspended animation). Practical experience with liquid nitrogen (-321°F and liquid helium (-452°F) will be included. A major part of the course will be independent study and a report on the cryogenic topic of your choice.

Method of Instruction: Lecture and Laboratory (first two weeks); independent study

Limit on Enrollment: 20

See also: INTERDEPARTMENTAL 01.3 Architectural Form and Structure

Mr. Andres and Mr. Winkler

POLITICAL SCIENCE

PS 70.3 Israel and Egypt, India and Pakistan: An Investigation of Two Deadly Quarrels

Mr. Leng

Comparative foreign policy analysis of the outbreak of violent conflict within these pairs of nations. The analysis will be empirical and quantitative. Some knowledge of statistics is recommended.

Method of Instruction: Seminar

Limit on Enrollment: 12

PS 71.3 Nature, Self and Politics: The Thought of Hobbes,
Spinoza and Rousseau

Mr. Nelson

According to M. B. Foster, the chief difference between ancient and modern political thought is the stress in ancient thought on nature as the guiding principle and in modern thought on freedom. Connected with the modern understanding of freedom are at least two additional concepts, self, which replaces the ancient notion of soul, and historicity, which gradually supplants nature. Affirmations about self and historicity involve challenges to the ancient understanding of nature, redefinition of its substance, and eventual repudiation of it altogether as a ground of political and moral obligation. In this course we intend to study a portion of the history and logic of the shift from nature to freedom and its attendants.

Method of Instruction: Informal lecture and discussions

Limit on Enrollment: 30

PS 72.3 Charismatic Leadership in Asia

Mr. Rosenberg

A study of the political biographies, autobiographies, public statements, and personal lives of (choose two): Mahatma Gandhi, Jawaharlal Nehru, Norodom Sihanouk, Ho Chi Minh, Sukarno, and Mao Tse-Tung.

Method of Instruction: Seminar

Limit on Enrollment: 30

PS 73.3 Presidential Campaigning

Mr. Thurber

The course will involve close study of the presidential campaigns of 1960, 1964, and 1968 as background for a simulation of a presidential election campaign. In the course of the simulation, students will be required to develop strategy and tactics for both nomination and election campaigns, to select and develop issues for these campaigns, to analyze the electorate in terms of social, economic, and ethnic characteristics in order to determine responses to issues and candidates, and to deal with all of the problems involved in publicizing a campaign.

Method of Instruction: Seminar

Limit on Enrollment: 40

PSYCHOLOGY

PY 74.3 Machines and Brains

Mr. Ewell

This course focuses on the principles and procedures of control and servo-system design. Through it the student will get a sense of some of the problems and solutions involved in instrumentation for behavioral or life science research. He will also become able, using either electromechanical or solid state devices, to simulate some of the simpler aspects of human brain function.

Method of Instruction: Laboratory

Limit on Enrollment: 20

Prerequisite: Intended for sophomore or upperclass majors in psychology or biology; freshmen should see the instructor

PY 75.3 Coding and Retrieval Strategies in Verbal Memory

Mr. Prouty

This course will involve reading and discussion of current research in the area of verbal learning and will focus specifically on verbal mnemonics as devices for coding of input and as retrieval strategies. Individual research projects will be generated by the seminar.

Method of Instruction: Seminar

Limit on Enrollment: 20

Prerequisite: A background in psychology is recommended, but not required. The ability to read and make sense of scientific prose is the important skill prerequisite to this seminar.

RELIGION

RE 76.3 Myth and Ritual

Mr. Rainey

A comparative study of selected theories concerning the origin and function of myth and ritual in various religious traditions. Particular emphasis will be placed upon the works of J. Campbell, M. Eliade, C. Kluckhohn, and H. Zimmer. Film resources will also be utilized.

Method of Instruction: Seminar

Limit on Enrollment: 20

An intensive study of the thought of perhaps the most influential of American philosophers with emphasis on his vision of what the Greeks called the good life. The course will explore the way Dewey's naturalism developed out of Neo-Hegelian Idealism under the influence of Darwinian evolutionary theory and will examine Dewey's critique of classical metaphysics, his view of the fundamentally practical and social function of philosophy, his instrumental theory of knowledge, his theory of an experimental method for making objective value judgements, his defense of the democratic idea, his theory of education which was a major source of ideas for the Progressive education movement in America, his reconciliation of science and religion, and his theory of the nature and function of the religious and aesthetic dimensions of experience.

Method of Instruction: Lecture and discussion

Limit on Enrollment: 20

RUSSIAN

While the political and economic aspects of the revolutionary theme in Russian literature have frequently been studied, little attention has thus far been given to the sociological impact of revolutionary ideology on the manners and morals of Russian society in the period from 1880-1917. Many little-known works from this period reveal surprising new aspects of yet another revolution that was brewing in Tsarist Russia. Selections will be read from the works of Tolstoi, Kuprin, Artzybashev, Andreev, Kuzmin, Annibal-Zinoviev and Kaminsky. Taught in English.

Method of Instruction: Reading and discussion

Limit on Enrollment: 40

A dramatization of Dostoevsky's *Notes From the Underground*. This will entail rewriting the work as a play and possibly staging it. However, the emphasis will be on the writing. Taught in English.

Method of Instruction: Studio workshop

Limit on Enrollment: 40

SOCIOLOGY—ANTHROPOLOGY

SA 80.3 Non-Linguistic Communication

Mr. Andrews

This course will be an examination of the concept of communication and its various non-linguistic manifestations. Included for examination are paralinguistic, kinesic (body gestures), tactile and olfactory phenomena as well as derivatives of language, e.g., sign language, drum and whistle languages, writing and various art forms.

Method of Instruction: Lectures, laboratories, seminars

Limit on Enrollment: 30

SA 81.3 The "Coleman Report" on School Desegregation:

Controversial Issues and Policy Implications Mr. Haerle

Research indicates that children of all backgrounds tend to do better in schools with a predominant middle-class (usually white) composition. "Fate control" has been found to be an important predictor of school performance for Negroes. These and similar kinds of issues were explored in the controversial Coleman report, Equality of Educational Opportunity. While focusing on the effects of peer mix (race, social class, etc.), school characteristics, and motivation on pupil achievement, this research has raised the following kinds of questions:

- (a) How viable and desirable is school integration as a public policy?
- (b) What does social science research tell us about the positive and negative effects of school desegregation on pupil achievement?
How valid and reliable are current research findings?
- (c) Does equal educational opportunity imply that students emerge from the educational process with equal skills? What impact can be assigned to family and other "external" factors?

To answer these questions, use will be made of the original Coleman Report, critical reviews, and case studies of different desegregation experience. Each student will be expected to do independent research on any one of the several social or educational implications of the Coleman report: busing to achieve racial balance; "quality education" versus integration; community control of the schools; teaching in the segregated and integrated classroom; residential segregation and community attitudes; or the role of the social scientist in public policy.

Fulfills requirement of a foundations course in education.

Method of Instruction: Seminar

Limit on Enrollment: 30

SA 82.3 World-view, Ethos, and Sacred Symbols in Four Cultures Mr. McCreery

Cultural anthropologists make the attempt to understand alien cultures from the inside out, from the natives' point of view. Given the goal of "entering in" to an alien culture the question arises, "How best to do it?" Should we relate to the people whose cultures we study as impartial observers, as colleagues, or as students? The four books to be read and discussed in this course exemplify these different approaches and also several radically different cultures, those of the Dinka and Dogon, tribes of East and West Africa, and the Tewa and Yagui, Southwest American and Mexican Indians.

Method of Instruction: Seminar

Limit on Enrollment: 30

Prerequisites: Some background in anthropology, religion, or philosophy will be helpful.

SA 83.3 Symbolic Interactionism and Ethnomethodology: An
Excursus into Phenomenological Sociology Mr. Nye

An investigation of two prominent and related schools of contemporary sociological thought. Both perspectives hold that societal life is essentially a network of subjectively held symbolic meanings; both claim to be social scientific improvements over "mainstream" sociology (especially that orientation called structural functionalism); both emphasize process over function and structure and both find their philosophical origins in German idealism. Yet, they differ in terms of favored methodologies and each is extremely critical of the other.

Although certain concepts and principles must be internalized before one can understand what either of these perspectives is about, the literature of each is not detached from the so-called real world. Symbolic interactionists and ethnomethodologists employ their perspectives to examine the problematic social worlds of transsexuals, pool hustlers, jazz musicians, winos and the like. That is, deviance is the subject matter par excellence of both schools of sociological inquiry.

The course objective is to critically examine the theory, methodology and substantive findings associated with each school with an eye toward determining which is more promising.

Method of Instruction: Seminar

Limit on Enrollment: 20

Prerequisite: SA 102, or see instructor

SPANISH AND ITALIAN

SI 84.3 Florence: The City and the People, Past and Present
Mr. Castiglione and Mrs. Castiglione

An in loco study of the social, political and economic factors which favored Florence and set the foundation for the literary and artistic achievements of the 14th century. A closeup view of Florence and her people will serve to underscore some typical elements of the Florentine social structure that are still evident today. The following books are suggested in preparation for the course: Roberto Sabatino Lopez, The Birth of Europe; Roberto Sabatino Lopez, The Three Ages of the Italian Renaissance; M. B. Becker, Florence in Transition (2 vol.); F. Schevill, History of Florence; Dante, The Divine Comedy (suggested translations: Bergin, Ciardi, Sinclair) and Boccaccio, Decameron.

Method of Instruction: Visits to churches, monuments, etc. in Florence and immediate surroundings; lectures; contacts with Florentines of different occupations and social levels. Students will be required to write a paper.

Limit on Enrollment: 30

Fee: Approximate cost, inclusive of transportation and lodging, \$600

SI 85.3 Reading Borges and Cortázar

Mr. Ilgen

An exploration into the realms of imagination created by Jorge Luis Borges and Julio Cortázar through the medium of their short fiction. The work of the course will center principally on the critical reading, analysis and discussion of the stories contained in the two best collections of their work in translation: Borges' El Aleph and Cortázar's Blow-Up and Other Stories. Reading will also include the film script for Michelangelo Antonioni's film Blow-Up, which was inspired by Cortázar's title story.

Method of Instruction: Seminar. Reading and discussion in English though students knowing Spanish are encouraged to read the works in the original. For those knowing Italian, Antonioni's Italian script will also be available.

Limit on Enrollment: 25

SI 86.3 Modern Brazilian Prose Fiction

Mr. Véquez

An introduction to modern Brazilian fiction. The course will trace the development of Brazilian literature from the turn of the century to the present through readings in the works of some of the major writers, including Machado de Assís, Jorge Amado, Graciliano Ramos and Guimarães Rosa. The seminar will be conducted in English and the books will be available in translation, though reading in Spanish will be urged for those with the capacity.

Method of Instruction: Seminar

Limit on Enrollment: 25

TEACHER EDUCATION

- TE 87.3 The Elements of Creative Thought: An Analysis of
the Process, and Its Implications for Pedagogy Mr. Jimenez

The course will involve studying the thought processes of creative thinkers in various fields, such as Paul Klee, Martin Luther, Dag Hammarskjöld, J.D. Watson, Carl Jung. It will also involve reading analytical works on thought processes, problem solving, and creativity, by such authors as Ghislen, Gordon, Harding, Kubie, Kuhn, Radon. An attempt will then be made to reduce findings to simple propositional form, and to develop pedagogical approaches to encourage the development in students of the kinds of thought processes that have proved to be creative. Fulfills requirement of a foundations course in education.

Method of Instruction: Seminar

Limit on Enrollment: 20

- TE 88.3 Survey of Educational Philosophies Mr. Pfeiffer

The course will involve in-depth examination of several well known educators as well as some lesser known authors, such as Boda, Bruner, Brammeld, Skinner, Hart, Hutchins, etc. Each student will choose an author, pursue him, and participate in discussions on educational problems from the point of view of his author. Fulfills requirement of a foundations course in education.

Method of Instruction: Lecture and Discussion group

Limit on Enrollment: 20

- See also: INTERDEPARTMENTAL 15.3 Teaching Laboratory Science to Pre-
College Students Mr. Watters
SOCIOLOGY-ANTHROPOLOGY 81.3 The "Coleman Report" on School
Desegregation Mr. Haerle

SPRING TERM 1973 CATALOGUE

Details on official policies regarding Degree Requirements, Departmental Programs, Grading, etc. may be found in the Middlebury College Handbook 1972-73 on Pages 29 through 42.

NORMAL PROGRAM

The normal program of study is four courses in the Fall and Spring Term. R.O.T.C. courses and required Physical Education are carried as electives without credit as a course unit. No extra charge is made for these programs. Only students who have demonstrated superior ability in their academic work are permitted to take more than four courses in a term. Students who wish to take fewer or more than four courses in a Fall or Spring Term must obtain permission from the Dean of Students.

FRESHMAN PROGRAM

All students must take in the freshman year one of the courses in the writing program: these include all courses in English-Drama at the 100 level, American Literature 101, and approved Winter Term writing courses. The successful completion of one of these courses is a graduation requirement. Students should begin work on their Physical Education Program during the freshman year. To complete his academic program, each freshman elects three other courses from those open to freshmen. In general, only those courses numbered from 100 through 190 are open to freshmen. Freshmen enrolled in a course within a department, however, may be assigned to a more advanced course by that department upon demonstration of special proficiency.

MAJOR CONCENTRATION

In registering for his major program the student normally consults the chairman of his chosen department. The chairman appoints a departmental adviser who recommends a pattern of courses for the student's subsequent years.

In addition to the specific courses required for a particular major, cognate courses may be recommended to further the student's particular academic interests or intentions. Departments offer different programs of Senior Work adjusted both to the nature of the field and the needs of the student. Basically, a department may offer as many as three units of Senior Work outside the regular course pattern. This Senior work may consist of Independent Study (700 Course) and/or General Examination (705 Course unit), Senior Seminar (704) or Senior Course (710). Students should consult the descriptions of the Senior Work for each department for details. The Senior Work courses may be distributed over the Fall, Winter and Spring Terms.

Should a student not be satisfied with his first choice of major he may, before the beginning of his third year, change to another major. Prior to the change, however, he should obtain assurance from the department to which the change is contemplated that he will be able to meet its major requirements. After the beginning of the third year a student may change his major only for exceptional reasons and with the consent of the Dean of Students.

Where a joint major involving two or more departments is desirable a single General Examination may be required. Details should be worked out with the department chairmen involved.

DEGREE REQUIREMENTS

In addition to the freshman and major requirements, certain additional requirements must be met before the Middlebury College degree is awarded.

1. To be eligible for a degree a student must successfully complete 32 Fall and Spring term courses or their equivalent and 4 Winter courses. No more than 14 Fall and Spring courses may be in the same department. A minimum of 10 courses must be completed in the major. Not more than 6 courses with a D grade may be applied to the degree requirement.
2. Freshmen may not elect more than one course in a subject in a term.
3. The last academic year of undergraduate work must be spent in residence in Middlebury, except as provided in the Technical, Medical, and Dental School Plans.
4. All students are required to complete the Physical Education Program.

SPECIAL PROGRAMS

Combined Professional School Plans and Pre-Medical or Pre-Dental Programs.

Students preparing for engineering, architecture, medicine, or dentistry should consult advisers. Any freshman even tentatively committed to pre-professional studies should consult Dean Walter A. Moyer, Jr., Chairman, during the Fall term. Others may consult him about any changes in requirements.

Environmental Studies. Middlebury College offers an interdisciplinary major in Environmental Studies, with Fields of Emphasis in Ecology, Environmental Chemistry, Environmental Geology, Human Ecology, and Environmental Physics. Students interested in this program should consult Professor H. E. Woodin, Coordinator of Environmental Studies, about specific course requirements. This program is best started in the freshman year. Consult advisers.

Junior Year Abroad. Students interested in a Junior Year Abroad program should discuss their plans early with their faculty adviser and the Dean of Students.

Teacher Education Program. Middlebury offers an interdisciplinary program of courses to prepare interested students to teach elementary or secondary school by introducing them to the appropriate areas of scholarship in history, philosophy, psychology, and sociology in addition to courses offered in Teacher Education. For a complete description of this program, see Teacher Education course listings.

Military Science Program. The Army Reserve Officers' Training Corps (ROTC) unit provides a voluntary program in Military Science which prepares selected students for a commission as a Second Lieutenant in either the Regular Army or the Army Reserve. A complete description of the program is given with Military Science course listings.

Washington Semester Program. Selected students each year spend one term in the national Washington Semester Program administered by American University. Interested students should contact Professor Paul Nelson, Political Science Department.

Exchange Programs. Middlebury has an arrangement with Berea College in Kentucky for one to one student exchanges during the Spring and Fall Terms. For information about exchange programs see the Dean of Students.

DEPARTMENTS OF INSTRUCTION

All courses are given as term courses with the exception of Senior Work (700) and 500 courses in an Honors Program. These course numbers may signify on-going work, and in such event are marked "S" (Satisfactory progress) or "U" (Unsatisfactory).

Courses numbered 100-199 are usually taken by freshmen; 200-299, by sophomores; 300-399, by juniors; 400-499, by seniors. Schedules are cleared on this basis and conflicts will thus be most easily avoided by taking courses in proper sequence.

At the head of each departmental section, the major is described and the requirements for a major in that department are stated, together with recommended courses.

Prerequisites to a course are shown in parentheses. Courses not being offered in Spring Term 1972-73 are bracketed. Abbreviations include: Lab., laboratory period; Lect., lecture period.

The College reserves the right, without further notice, to cancel any courses herein described, or to make any other changes in staff, fees, and courses which may be deemed necessary.

The Departments of Instruction are organized in four Divisions: Humanities, Foreign Languages, Social Sciences, and Natural Sciences.

Division of the Humanities

American Literature	Music
Art	Philosophy
English and Drama	Religion

Division of the Foreign Languages

Classics	Russian
French	Spanish and Italian
German	

Division of the Social Sciences

Economics	Psychology
History	Sociology-Anthropology
Political Science	Teacher Education

Division of the Natural Sciences

Biology	Mathematics
Chemistry	Physical Education and
Geography and Geology	Athletics
	Physics

COURSES WHICH DO NOT APPEAR IN PARENTHESES WILL BE OFFERED IN THE SPRING TERM 1973.

INTERDEPARTMENTAL

ID 305 Language Learning: Theory and Practice (Also offered Fall 1973.)

This course will relate principles and findings from the fields of linguistics, psychology, anthropology, sociology, literature, and educational research to the art of foreign language learning and teaching. There will be an introduction to resources available to foreign language teachers from professional associations, governmental agencies, and private industry. There will be discussion of bilingual education for linguistic minorities in the U.S. and a brief introduction to foreign language testing. Observation of student teachers by fellow students and the instructor will form the basis for the practicum discussions. Meetings one day a week - evenings. Method of Instruction: Seminar and Observations. (Open to Language/teacher education majors and by permission.)

Mr. Paquette

AMERICAN LITERATURE

The major in American Literature is expected to develop an understanding of the major figures and the chief literary movements as manifested in the writings of both major and secondary figures. The interplay between the general culture and literature and the relationship of writers to one another are emphasized.

Required for the major: AL 101 or 201 and 202; AL 301 and 302; four other term courses in the Department; the Senior Program. Each major is required to take at least two courses in American history and two term courses in a non-American literature, the courses to be determined in consultation with his Faculty Adviser.

The Senior Program consists in a Fall Term seminar and a program of Independent Study in the Spring Term, culminating in a General Examination. Independent Study is based on a background reading list and informal group discussions.

Honors Program: Departmental honors are awarded on the basis of a Senior Thesis. To qualify as a candidate for honors one must have had an average of B- or over for his previous work in the Department. In consultation with his Faculty Adviser and with the approval of the Department, he will select a topic for independent investigation in the Spring of his Junior year. In the Senior year he will take AL 700 (Senior Research) in the Fall Term and in either the Winter or the Spring Term.

An oral examination will be given on the thesis. The examination will be given by two members of the Department and one person from outside the Department. Highest Honors will be granted for a grade of A or above, High Honors for a grade of B- or A-, Honors for a grade of B. For Honors in any of these categories he must also have a final average of B for all work in the Department and a mark of B on the General Examination.

The Freshman Writing Program

All students must elect in the freshman year one of the courses in the writing program: these include all courses in English-Drama at the 100 level, American Literature 101, and approved Winter Term writing courses. These are courses designed to develop and

improve the skills of written communication; they are taught in sections of limited enrollment, require frequent written assignments, and proceed through close correction of papers, class discussion of both particular and general problems of writing and, as may be necessary, individual conferences. Satisfactory completion of one of these courses is a graduation requirement. Freshmen wishing to satisfy this requirement by taking American Literature 101 must register for the special freshman sections.

AL 101, 201 American Literature (Also offered Fall 1973.)

A study in the growth of American literature from the seventeenth century through the first half of the nineteenth century, as emerging from its cultural backgrounds, and the significance of its major writers: Edwards, Franklin, Cooper, Irving, Poe, Hawthorne, Emerson, Thoreau, Whitman, and others. (AL 101 is restricted to freshmen.)

Staff

AL 202 American Literature (Also offered Fall 1973.)

A study in the growth of American literature from the second half of the nineteenth century to the present day, as emerging from its cultural backgrounds, and the significance of its major writers: Melville, Twain, James, Crane, Faulkner, Frost, Eliot, Stevens, Hemingway, and others. (AL 101 or 201.)

Staff

(AL 301 The American Novel) To be offered Fall 1973.

AL 302 The American Novel

An analysis of thematic and structural aspects in representative American novels of the twentieth century with concentration on Cather, Dos Passos, Fitzgerald, Hemingway, Faulkner, Wright, Ellison, Malamud, and Bellow. (AL 301.) Mr. Munford

AL 401 The American Short Story

A study of the development of short prose fiction in America from Washington Irving to the present time. The history of the short story form, techniques, and changing point of view will be considered with special regard to Hawthorne, Melville, James, Crane, Fitzgerald, Hemingway, and others. (AL 202 or permission.)

Mr. Beck

(AL 402 Emerson, Melville, Whitman) To be offered Fall 1974.

AL 403 The American Landscape in Prose

The evolution of American attitudes toward the natural landscape and of the 'spatial' literary forms designed to express those attitudes: the sketch and the travelogue, the descriptive essay, the device of setting in fiction. To be considered: works by maritime explorers through the 17th century; by 18th century travellers and naturalists (Bartram, Jefferson); by 19th and 20th century explorers and travellers (Lewis and Clark, and so on); naturalists and fiction writers. Selected poems might also be considered. (Offered in alternate years.) (AL 202 or permission.)

Mr. Conron

AL 404 Modern American Poetry

This course will focus on the work of five American poets and emphasis will be placed on the related themes of "limits" and "cure" as each poet touches upon them: E. A. Robinson, Robert Frost, Wallace Stevens, William Carlos Williams, Theodore Roethke. ("The utmost must be good and is/And is our fortune. . ."--Wallace Stevens) (Senior American Literature and English Majors. Juniors by permission.)

Mr. Pack

(AL 405 American Criticism) To be offered in 1974-75.

(AL 406 Black American Literature) To be offered Fall 1973.

(AL 407 American Biography) To be offered Fall 1974.

(AL 408 Seminar: Henry James) To be offered Fall 1973.

AL 410 Seminar: Studies in Contemporary American Poetry

An intensive study of three American poets who have come to prominence since the end of the Second World War: Robert Lowell, John Berryman, and James Wright. Limited to twelve students. (Offered in alternate years.) Mr. Stitt

(AL 412 Folklore and Mythology) To be offered Fall 1973.

AL 500 Special Research (Also offered Fall 1973.)

Open to individual qualified majors. (Permission.) Staff

AL 700 Senior Research (Also offered Fall and Winter 1973-74.)

For Senior majors who are candidates for Departmental Honors. Staff

(AL 704 Senior Seminar) To be offered Fall 1973.

AL 705 Independent Study

Group discussion based on a reading list of historical and critical studies. The discussions and readings are designed to prepare the student for the General Examination, in which he will be expected to make informed statements about literary relationships and the interplay of literature and the general culture. (Senior Majors.)

Mr. Munford and Staff

THE PROGRAM IN AMERICAN STUDIES

This program offers students an opportunity to work in related aspects of American culture in various departments and in Junior and Senior seminars which integrate the student's course of study.

1. AL 101 or 201, 202 (or for qualified students other courses approved by the Department).
2. Two courses in American History.
3. Three additional courses will be required in AL and HI, with at least one in each department.
4. Four courses in departments other than AL and HI such as Art, Economics, Political Science, Religion, Sociology or, until other courses are offered, independent work in American Philosophy.
5. In the second semester of the Junior year a seminar, with one faculty member responsible for organization and with the participation of other faculty when their particular interests would contribute to the subject.
6. A seminar and thesis in the senior year.

This is a total course requirement of 14. The student will be designated as a major in History-American Studies or American Literature-American Studies.

AS 400 Seminar in American Studies

An introduction to the nature and problems of American Studies. Examples of scholarship in the field will be examined. Each student will conduct a piece of original research and submit a report. (Junior majors.) Mr. Munford and Staff

(AS 700 Independent Study) To be offered Fall 1973.

For students who have qualified for the American Studies Senior Program by virtue of their work in AS 400, the Junior Seminar. Under the guidance of a faculty member, each student will do research on some aspect of American culture. (AS 400.)

AS 704 Senior Seminar - Thesis

In weekly meetings, students who have taken AS 700 will report on the results of their research for criticism and discussion, and assign common readings for the group. The thesis will be submitted at the end of the year, not later than April 15. (AS 400, 700.)

Faculty Advisers: Mr. Catton, Mr. Ferm, Mr. Munford, Mr. Nelson, Mr. Stitt. Students in the Program must also consult with a member of the American Literature or History Departments concerning their course selection.

ART

Required for the major: In the belief that experience in both the practice and history of art constitutes the most rewarding program, the Department requires both AR 101, Introduction to the Visual Arts (or AR 102, Twentieth Century Painting and Sculpture), and AR 103-104, Introduction to Design, of its beginning students. Completion of these courses with a grade of C or better qualifies a student for the major.

Students may complete their requirements in either of two ways:

Alternative A: six additional courses in the history of art, plus senior work.

Alternative B: four additional studio courses, and four additional courses in history of art (two of which shall have as their subject art before 1800), plus senior work.

Senior work:

Alternative A: Students elect two terms of AR 700, normally Fall and Winter, and write a senior thesis.

or

Students elect two terms of AR 700 in areas in which they have already done course work, and write two senior essays.

Alternative B: Students elect at least two studio courses beyond the six required for the major.

or

With permission of the Department, students elect AR 700 in each of the three terms, and carry out a sustained studio project in one medium.

Honors: are awarded to students who do outstanding work in studio or art history. Normally a senior thesis or a portfolio produced during senior year must be presented by candidates for honors.

(AR 101 Introduction to the Visual Arts) To be offered Fall 1973.

AR 102 Twentieth Century Painting and Sculpture

A consideration of selected problems--aesthetic, perceptual, critical--in an attempt to establish the uniqueness of our own century's artistic expression. Beginning with the pictorial revolution of Impressionism and its aftermath, various movements will be considered in depth: Symbolism, Expressionism, and Abstraction: Cubism and Surrealism; Abstract Expressionism, and the numerous aspects of art of the 1960's. Two lectures, one discussion. Open to Freshmen and Sophomores only. (Not open to students who have taken AR 202.)

Mr. Reiff

(AR 103 Introduction to Design) To be offered Fall 1973.

AR 104 Introduction to Design

Design in the arts with special emphasis of sculptural and architectural problems.

(AR 103) Limited to 30 students.

Mr. Bumbeck, Mr. Cooney,
Mr. Markhoff

AR 201 Art of the Italian Renaissance

A selective survey of Italian art and architecture from 1250 to 1600, with an emphasis upon leading masters seen in their artistic, intellectual, and religious context.

Mr. Andres

(AR 203 The Art of India) To be offered Fall 1973.

AR 204 The Art of China and Japan

An historical and stylistic survey of the painting, sculpture, ceramics, jades, architecture, and bronzes of China and Japan. History, religion, artistic theories, and techniques are studied to provide students with a sufficient background. While no previous knowledge of Oriental cultures is required, AR 203 is recommended. Offered in alternate years.

Mr. Reiff

(AR 205 Figure Drawing) To be offered Fall 1973.

AR 206 Figure Drawing

A continuation of AR 205, open to those who have not had AR 205 only by permission.

Mr. Cooney

(AR 207 American Art) To be offered Fall 1973.

AR 301 Modern Architecture

The Western tradition in architecture since the Industrial Revolution. A survey of the men, monuments, and developments that established the aesthetic, social, and technological background for our contemporary architectural scene.

Mr. Andres

(AR 302 Baroque Art) To be offered 1973-74.

(AR 303 The Art of Northern Europe, 1300 to 1600) To be offered Fall 1973.

AR 305 Art of the Nineteenth Century: European Painting and Sculpture

From later 18th century Romanticism through Impressionism, this course will empha-

size English and French artists, with major detours to Canova's Italy and Goya's Spain. Two lectures per week.

Mr. Hunisak

(AR 307 The Art of the City) To be offered 1973-74.

(AR 309 Painting) To be offered Fall 1973.

AR 310 Painting

A continuation of AR 309. Emphasis will be placed on the possibility and capacity of one medium, oil paint, to give substance to the student's sensory images of sight and touch. Limited to 30 students. (AR 103, AR 104, AR 309 or permission.)

Mr. Cooney

(AR 311 Ancient Art) To be offered 1973-74.

(AR 313 The Art and Architecture of Medieval Europe, 700-1400) To be offered 1973-74.

AR 314 The Ancient World in Transition: from Classical to Medieval Art

The course will examine the transformation of the art of the Ancient World from its classically-oriented interest in the realistic portrayal of man and his surroundings to a focus upon the new and developing awareness of his non-physical, spiritual essence. The influence of cultural changes -- political, philosophical and religious -- will emerge as a dominant force in this transformation.

Mr. Stone

(AR 315 Printmaking) To be offered Fall 1973.

AR 316 Printmaking

A continuation of AR 315. Limited to 20 students. (AR 103, AR 104, AR 315 or permission.)

Mr. Bumbeck

(AR 319 Sculpture) To be offered Fall 1973.

AR 320 Sculpture

A continuation of AR 319. Limited to 20 students. (AR 103, AR 104, AR 319 or permission.)

Mr. Markhoff

(AR 401 Seminar in Modern Art) To be offered in 1973-74.

(AR 402 Seminar in Renaissance Art) To be offered in 1974-75.

AR 404 Seminar in Art Criticism

To arrive at a working definition of art criticism, as well as to become aware of the numerous problems confronted in that process, each student will write a number of short critical essays. In addition, various 18th and 19th century writers - including Reynolds, Ruskin and Baudelaire will be studied, with the aim of determining their fundamental attitudes toward art and criticism. Finally, each student will be asked to evaluate the writing of one 20th century critic or the body of critical writing which has been generated by one artist or art movement. Limited to 12 students. (Permission.)

Mr. Hunisak

AR 500 Advanced Studies in the Visual Arts
Supervised independent work in art history or studio.

Staff

AR 700 Senior Independent Study

Staff

BIOLOGY

The Department of Biology offers programs of study in a broad spectrum of areas, ranging from life processes at the molecular level to the interrelationships of whole organisms and their environments. The Major Program is designed to enable the liberal arts student to understand the biological world and man's role in it, as well as to prepare students for graduate and professional schools. The Department is well equipped to offer laboratory study and student research opportunities in many areas. In addition, the geographical location of Middlebury College, with thousands of acres nearby owned by the College or within the Green Mountain National Forest, provides an excellent outdoor laboratory for ecological studies.

Each student electing a Biology major plans his program of courses in close consultation with a faculty adviser within the Department. This program will include BI 110, other Biology courses to bring the total within the Department to at least 10, and at least 3 cognate courses chosen from the offerings of the departments of Chemistry, Physics and Mathematics. This procedure is intended to allow the student maximum flexibility in designing a major program which fits his individual interests while providing him the guidance needed to avoid mistakes which might hamper his future career.

A separate, joint major with Chemistry has been developed to enable students to study aspects of both fields without having to take all the courses prescribed for a pure major in either field. The Department also participates in the interdisciplinary Environmental Studies major. Special major programs involving biology and other fields can be arranged to suit individual needs.

Students planning careers which require graduate or professional school training involving biology should be familiar with the subject matter included in CH 101, CH 241, and CH 242; MA 112; and PH 109, and PH 110, in addition to their biology program. Some medical and graduate schools expect additional courses in mathematics and chemistry. Students who anticipate applying to graduate or professional school programs will be urged by their advisers to include appropriate courses in their programs.

The Department admits a limited number of graduate students as candidates for the Degree of Master of Science in Biology. The requirements of this program include research, a thesis, an oral examination, and some assisting in undergraduate laboratories.

Courses designated with an asterisk* may be taken without laboratory under the following conditions: (1) The stated prerequisites for the course must be met. (2) Students majoring in Biology or jointly in Biology and other subjects may not count such courses toward the fulfillment of the major.

Required for a Major: BI 110; 9 elective courses within the Biology Department; 3 cognates chosen from Chemistry, Mathematics, and Physics. Courses with optional laboratories in Chemistry and Physics must be taken with laboratory to fulfill this cognate requirement. Recommended: see list above, advised as preparation for graduate and professional schools.

Required for a Joint Major in Biology and Chemistry: see description under Chemistry.

Honors Program: students should apply during the Spring Term of the Junior year. Honors are awarded on the basis of an Advanced Study (BI 500) project of superior quality and satisfactory completion of requirements to be specified by the Department.

(BI 103 Biology and its Implications for Humans) To be offered Fall 1973.

(BI 110 Concepts of Modern Biology) To be offered Fall 1973.

***BI 201 Invertebrate Biology**

An introduction to the study of Invertebrates, with lecture emphasis on the mechanisms whereby various species have adapted to saline, fresh-water and terrestrial habitats. Laboratories will implement this physiological approach, but they will attempt mainly to familiarize students with a large variety of different organisms. Students individually will investigate different problems for seminar presentation. (BI 110 or permission.)

Mr. Watters

(*BI 203 Plant Form and Function) To be offered Fall 1973.

***BI 205 The Developmental Biology of Plants and Animals**

An introduction to animal and plant development, with emphasis on the mechanisms underlying the various developmental phenomena. Laboratory work will include descriptive and experimental approaches to developmental problems. 3 hours lecture, 4 hours laboratory with the first hour devoted to discussion. (BI 110 or permission.)

Mr. Greenwood

(BI 210 Comparative Vertebrate Anatomy) To be offered Fall 1973.

BI 211 Introductory Vertebrate Physiology

A one semester course designed to acquaint students with the functions of the principal organs and organ systems of vertebrates. Gross physiology is emphasized. Although systems are examined individually, the homeostatic aspect of integrated, coordinated function is stressed.

Mr. Fischer

BI 305 Microbial Ecology

An introduction to the biology of microorganisms from an ecological point of view, covering principally the bacteria, bacterial viruses, and unicellular algae. The role of microorganisms in the cycling of materials within the biosphere will be stressed. Other topics to be discussed include microbial genetics as it relates to bacterial adaptation, symbiosis and the ecology of disease, and the applications of microbial ecology in such areas as waste treatment and pollution control. The laboratory will include exercises dealing with the isolation, culture, and identification of microorganisms as well as experiments on microbial interactions in simplified ecosystems. 3 hours lecture, 3 hours laboratory. (BI 110 or 103, CH 101)

Mr. Bell

(BI 311 General Ecology) To be offered Fall 1973.

BI 312 General Ecology

The organism in relation to the biotic environment. The inter- and intra-specific reactions of an organism to other organisms at all levels of social organization. Population dynamics and control. Effect of such phenomena as territoriality, aggression, communication, predation, parasitism, energy flow and nutrient cycling on the total ecosystem will be considered. Influence of the human species on natural ecosystems will be stressed. Laboratory reports and term paper required. (BI 103 or 110 or permission.) 3 hrs. lecture, 3 hrs. laboratory. Mr. Woodin

*BI 314 Genetics

Lecture topics will include the nature and action of hereditary material, linkage, mutations, chromosomal aberrations, polyploidy, molecular genetics and population genetics. The material will be presented from the point of view of the experimental basis for current ideas. The laboratory work is designed to introduce some of the major organisms and techniques used in research and includes training in analyzing and reporting data. 3 hours lecture, 3 hours laboratory. (BI 110 or 103.) Miss Tepperman

(*BI 316 Animal Behavior) To be offered 1973-74.

(BI 350 Topics in Cellular Biology) To be offered Fall 1973.

(BI 401 Advanced Genetics) To be offered 1973-74.

(BI 408 Current Problems in Cellular and Developmental Biology) To be offered in 1973-74.

(BI 410 Adaptation and Evolution) To be offered in 1973-74.

BI 500 Advanced Study (Also offered Fall and Winter 1973-74.)

A project involving laboratory research or extensive library study on a topic chosen by the student and a faculty adviser. For majors in Biology. (Permission.)

Staff

BI 750 Senior Work (Environmental Studies) (Also offered Fall and Winter 1973-74.)

Independent Study - Senior Thesis

Independent Study, normally involving a laboratory or field research project for any two of the three senior terms. Required of Environmental Studies majors specializing in ecology. Not open to Biology majors. Staff

BI 900 Research and Thesis (Also offered Fall and Winter 1973-74.)

Required for all candidates for the Master's degree. Staff

CHEMISTRY

The Department of Chemistry believes that the basic program required of all majors provides a firm foundation in fundamental principles on which individual students may build to accommodate a variety of objectives including secondary school teaching, a position in industry or advanced work in graduate or professional school. Although

non-majors may take, with the exception of CH 412, any laboratory course in the department without the laboratory, courses constituting a part of a major in chemistry must be taken with laboratory. The Department of Chemistry is accredited by the American Chemical Society and students taking the appropriate electives may be certified by the Society.

Required for a Major: CH 101*, CH 131, CH 211, CH 241, CH 242, CH 351 plus four elective courses within the Department; MA 112, MA 113, PH 109 and PH 110. Two or three units of independent study may be included in the four required chemistry electives. Students with a professional interest in chemistry are encouraged to elect CH 341, CH 352, CH 412, CH 431, CH 452, two course credits of independent study, MA 201, MA 202 and GN 101, GN 102 or RU 101, RU 102.

Joint Major in Biology and Chemistry: Required for a major: Biology BI 110, and four electives in Biology; Chemistry: CH 101*, CH 131, CH 211, CH 241, CH 242, CH 351; MA 112, MA 113, PH 109, PH 110 and three additional electives from Biology, Chemistry, Mathematics or Physics.

A deposit fee to cover cost of broken apparatus is charged in each laboratory course, to be paid at the beginning of each term.

CH 101 Fundamentals of Chemistry (Also offered Fall 1973.)

Fundamental principles of Chemistry. Atomic theory and atomic structure, chemical bonds, stoichiometry, kinetic theory and the states of matter. Problem drill, conferences. Laboratory work deals with the testing of theories by various quantitative methods. Students with adequate secondary school preparation are encouraged to consult the Department for permission to elect Chemistry CH 211, CH 131, or CH 241 in place of this course. 3 hrs. lecture, 4 hrs. laboratory. Breakage fee. Mr. Gleason

CH 107 Same as CH 101 but without the laboratory.

CH 102 Environmental Chemistry

Principles of general chemistry necessary for an understanding of the chemistry of natural systems. Particular emphasis on the chemistry of sulphur, nitrogen, and carbon cycles and of the heavy metals relative to air, water, and soil pollution. Laboratory experience in environment sampling and analysis. 3 hrs. lecture, 3 hrs. laboratory. Breakage fee. Mr. Pool

CH 108 Same CH 102 but without the laboratory.

CH 131 Systematic Inorganic Chemistry (Also offered Fall 1973.)

A systematic study of the elements and their compounds based on the Periodic Table. The isolation of the elements from their natural sources, and the synthesis of some important types of inorganic compounds. The properties of selected elements and their compounds are discussed in class and/or studied in the laboratory using various analytical methods. (CH 101 or permission.) 3 hrs. lecture, 3 hrs. laboratory. Breakage fee. Mr. Pool

CH 137 Same as CH 131 but without the laboratory.

(CH 211 Analytical Chemistry I) To be offered Fall 1973.

(CH 217 Analytical Chemistry I) To be offered Fall 1973.

Without laboratory.

*CH 101 is the normal introductory course in Chemistry. However, students may qualify for permission to omit CH 101 and begin their studies in Chemistry with CH 211 or CH 131, or CH 241. Consult the Chairman of the Department.

CH 241, CH 242 Organic Chemistry I and II (Also offered Fall 1973.)

An introduction to the study of the compounds, both aliphatic and aromatic, of carbon. The approach is based on the properties of functional groups with considerable emphasis on electronic theory and reaction mechanisms. Laboratory exercises involving the synthesis of organic compounds, the analysis of various classes of compounds, and the identification of unknowns complement the lecture material. (CH 101 or permission; CH 241 must precede CH 242.) 3 hrs. lecture, 6 hrs. laboratory. Breakage fee.

Mr. Gleason, Mr. Harnest

CH 247, CH 248 Same as CH 241, CH 242 but without the laboratory. (Also offered Fall 1973.)

(CH 341 Organic Chemistry III) To be offered Fall 1973.

(CH 347 Organic Chemistry III) To be offered Fall 1973.

Without laboratory.

(CH 351 Physical Chemistry I) To be offered Fall 1973.

(CH 357 Physical Chemistry I) To be offered Fall 1973.

Without laboratory.

(CH 352 Physical Chemistry II) To be offered Spring 1974.

(CH 358 Physical Chemistry II) To be offered Spring 1974.

Without laboratory.

CH 412 Advanced Analytical Chemistry

Principles and theory of separations, both qualitative and quantitative, by chemical and physical methods. Instrumental methods of analysis: spectrophotometric, electro-metric, and others. (PH 109, CH 211, and 4 additional semester courses in chemistry.) 3 hours lecture, 3 hrs. laboratory. Breakage fee.

Mr. Roberts

(CH 421 Biochemistry) To be offered Fall 1973.

CH 422 Biochemistry

A study of intermediary metabolism and bioenergetics of biological systems; a brief look at genetic storage and transmittance of information. Some of topics studied are: ATP and tricarboxylic acid cycles and biosynthesis of carbohydrates, amino acids, and proteins. Optional laboratory work involves individual projects dealing with various

biochemical techniques. (CH 252, CH 351, or permission; Biology: BI 101 is recommended.) 3 hrs. lecture, 3 hrs. laboratory optional. Breakage fee.

Mr. Schuh

(CH 431 Advanced Inorganic Chemistry) To be offered Fall 1973.

CH 442 Advanced Organic Chemistry

An extensive treatment of the relation between structure and reactivity in organic systems will be given. Topics will include thermodynamics, conformational analysis, kinetics, orbital symmetry, bonding theory and the application of modern spectral techniques to physical organic chemistry. (CH 242.) Mr. Ledlie

(CH 443 Advanced Organic Chemistry) To be offered Spring 1974.

Topics in synthetic organic chemistry.

CH 452 Physical Chemistry III

The elements of wave mechanics with chemical applications; atomic and molecular structure; spectroscopy and photochemistry. (CH 351, PH 110.) Mr. Roberts

CH 500 Independent Study Project (Also offered Fall 1973.)

Individual Study for qualified students. Permission. Breakage fee. Staff

CH 700 Senior Work (Also offered Fall 1973.)

Senior majors may register for two or three course equivalents. The student plans and carries out a laboratory research project generally related to current faculty research interests. This work is normally culminated by the writing of a senior thesis.

Staff

CLASSICS

Courses in Classics are intended to enable the student to attain a rapid and accurate reading knowledge of Greek or Latin, and then to read broadly while developing critical skill and a sense of the art of language. A major is not offered normally, and may be elected only by special arrangement with the Chairman.

Classics in Translation

(CL 271 Greek Intellectual History) To be offered in 1974-75.

CL 272 Greek Tragedy

Extensive reading in Greek drama in English, with intensive study of selected plays. The student is introduced to the criticism of ancient authors with detailed attention to critical methods and some of their dangers. Historical background is presented as needed, and the student is rigorously introduced to the structural analysis of poetic discourse.

Mr. Harris

(CL 273 Introduction to Greek Scientific Thought) To be offered Fall 1973.

Latin

(CL 101 Elementary Latin) To be offered Fall 1973.

CL 102 Elementary Latin
A continuation of CL 101.

Miss Heibges

(CL 201 Intermediate Latin) To be offered Fall 1973.

(CL 202 Intermediate Latin) To be offered Spring 1974.

(CL 301 Advanced Latin) To be offered Fall 1973.

CL 302 Advanced Latin

Vergil: An intensive study of Books VII, VIII and XII of the Aeneid. Miss Heibges

Greek

(CL 103 Elementary Greek) To be offered Fall 1973.

CL 104 Elementary Greek

A continuation of CL 103.

Mr. Harris

(CL 203 Intermediate Greek) To be offered Fall 1973.

CL 550 Independent Study (Also offered Fall 1973.)

Students will select an author or area not previously studied and work largely on their own, conferring weekly with the staff about problems in language and interpretation as they arise.

Staff

ECONOMICS

The Major concentration is composed of two introductory courses; two "core" courses - Microeconomic Theory and Macroeconomic Theory; and eight elective courses. An Honors Seminar is offered for senior majors.

The Department strongly recommends that Economics majors take MA 112 (Mathematical Analysis I) and/or EC 310 (Mathematical Economics) early in their program. Majors should also consult with their Department adviser for other appropriate cognate courses.

A student may pass either EC 150 or EC 155, the introductory courses, by taking qualifying examinations.

Students considering graduate programs in (i) Economics, are urged to take EC 210, EC 310 and EC 410; (ii) Business, EC 210, EC 220 and EC 320; (iii) Law, EC 220.

EC 150 Contemporary Economic Problems (Also offered Fall 1973.)

An introduction to economic problem solving for students seeking to achieve a better understanding of the economic forces governing society. Staff

EC 155 Introduction to Economic Theory (Also offered Fall 1973.)
An introduction to demand, supply, elasticity, costs of production, and other
microeconomic concepts. Staff

(EC 210 Economic Statistics) To be offered in 1973-74.

EC 220 Principles of Accounting

Accounting procedures for proprietorships and corporations with maximum emphasis
on theoretical considerations involved. (This course is strongly recommended for all
students anticipating graduate study in law or business.) Mr. Craven

(EC 230 The Industrial Revolution and its Antecedents) To be offered in 1973-74.

(EC 260 Consumer Economics) To be offered Fall 1973.

(EC 270 Public Finance) To be offered in 1973-74.

EC 280 Labor Economics

Economics of manpower and the labor market; the role of unions; labor legislation.
(EC 150 or EC 101 or EC 102.) Mr. Stevenson

(EC 310 Mathematical Economics) To be offered Fall 1973.

(EC 320 The Economics of Corporate Behavior) To be offered in 1973-74.

EC 330 The Economics of Development

An analysis of history, theory, and competing contemporary policies for economic
development of less-developed countries. (EC 150 or EC 101 or EC 102.)
Mr. Wolff

(EC 335 Comparative Economic Systems) To be offered Fall 1973.

(EC 350 Microeconomic Theory) To be offered Fall 1973.

EC 355 Macroeconomic Theory

This course presents an analysis of the behavior of the economy as a whole, focusing
on such concepts as measurement of national income, determinants of national income,
employment, inflation, and business cycles. Both Classical and Keynesian theories of
macroeconomic behavior will be discussed. (EC 150; sophomores, juniors, seniors
only.) Miss Schneider

EC 360 Urban Economics

This course will consider such topics as the location of economic activity; size distri-
bution of cities; trends in U. S. urban structure; urban transportation, housing, and
finance; planned cities; and metropolitan governments. (EC 150.)

Miss Schneider

(EC 365 Environmental Economics) To be offered in 1973-74.

(EC 370 Monetary Theory and Institutions) To be offered Fall 1973.

EC 410 Econometrics and Introduction to Forecasting Methods

A study of economic problems utilizing mathematics, economy theory, and statistics to determine the parameters that explain economic behavior. (EC 210 and EC 250 or EC 350 or permission.)
Mr. Waters

EC 415 An Introduction to the Theory of Economic Growth

An examination of the roles and interaction of the major economic variables in the growth process (investment in capital, labor, technological progress, etc.). Emphasis is on the growth process of more mature economies rather than the underdeveloped world. (EC 310 or MA 112.)
Mr. Waters

EC 440 The Economics of International Trade

A study of the economic basis of trade among nations, its composition, and impact on domestic economies. (EC 350.)
Mr. Claudon

(EC 450 History of Economic Thought) To be offered in 1974-75.

(EC 460 Industrial Organization and Public Policy) To be offered Fall 1973.

(EC 470 Macroeconomic Policy) To be offered Fall 1973.

EC 480 Radical Economics

An examination of radical critiques of the methodology and content of orthodox economics. (EC 350 or EC 355.)
Mr. Craven

(EC 490 Honors Seminar) To be offered Fall 1973.

EC 500 Individual Special Projects (Also offered Fall 1973.)

(Permission.)
Staff

ENGLISH AND DRAMA

The Department offers majors in English Literature and in Drama. The symbol ED is used to designate all courses offered by the Department, e.g., ED 103, ED 235, ED 442, etc.

Because of the varied nature of the Department's offerings, courses are differentiated by their second and third digits in the following manner:

Literature (00-19)

Theatre Arts (40-59)

Dramatic Literature (20-39)

Writing (60-79)

The Freshman Writing Program

All students must elect in the freshman year one of the courses in the writing program: these include all courses in English-Drama at the 100 level, American Literature 101, and approved Winter Term writing courses. These are courses designed

to develop and improve the skills of written communication; they are taught in sections of limited enrollment, require frequent written assignments, and proceed through close correction of papers, class discussion of both particular and general problems of writing and, as may be necessary, individual conferences. Satisfactory completion of one of these courses is a graduation requirement. Freshmen who have completed the Writing Program requirement may, in their freshman year, elect a second, different ED 100 level course, space permitting.

ED 101 Narrative Fiction (Also offered Fall 1973.)

An encounter with the complex fictional worlds of D.H. Lawrence, James Joyce, William Faulkner, and other writers, mostly from the modern period. The student assesses and writes about personal experience in papers which serve as introductions to the novels and short stories. Then the student moves beyond it to a sense of the validity of the reading experience itself. These papers, together with the fictional works, form the topic of class discussion.

Mr. Cabot and Staff

ED 103 Lyric and Narrative Poetry (Also offered Fall 1973.)

The course concentrates on close analysis of selected poems both traditional and modern. It will savor the musical, metaphorical and dramatic aspects of poetry, the relationship between voice and implication, between sound and sense. "Every poem is a new metaphor inside or it is nothing."--Robert Frost. "I do not know which to prefer./The beauty of inflections/or the beauty of innuendoes."--Wallace Stevens.

Mr. Littlefield

ED 105 Drama (Also offered Fall 1973.)

Play within play: an examination of how the theatre and the cinema sometimes take their own forms as a principal motif and a central figurative convention. Works studied will include Shakespeare's *A Midsummer Night's Dream* and *Hamlet*; Johnson's *Volpone*; Beckett's *Endgame*; Vigo's *Zero de Conduite*; and Fellini's *8 1/2*. Mr. Teush and Staff

(ED 160 Sensibility) To be offered Fall 1973.

ED 170 Prose Fiction I (Also offered Fall 1973)

The writing, reading, and analysis of short fiction. Out of three kinds of activities will come subject matter for class discussion and workshops; (1) each student will write several stories or related episodes; (2) a series of writing assignments drawing on the student's own experiences will provide exercises in the creation of structure and in the manipulation of means of perception and scene; (3) several collections of short stories in the modern tradition will be read and discussed closely.

Mr. Martin and Staff

ED 175 Poetry I (Also offered Fall 1973.)

Each student will write at least one poem a week, exploring a variety of poetic forms. The class will examine closely and critically poems written by students and published poets, when possible tracing development of published poems through drafts.

Mr. Conron

Major Programs

Required for a Major in English are (1) Interpretation of Literature: an Historical Approach (ED 201-202) or the Qualifying Examination; (2) Distribution

Courses: five courses in literature, one chosen from each of the following groups: A, ED 211, 227, 308, 404; B, ED 224, 303, 304, 321; C, ED 206, 305, 306; D, ED 207, 235, 313, 314, AL 301; E, ED 208, 212, 325, 326, AL 302, AL 404; (3) the Senior Program.

The Qualifying Examination will test the student's ability to interpret literature critically and will examine his grasp and comprehension of literary works in an historical context. The Qualifying Examination will be offered twice: once during the regular examination period at the end of the second semester, when it will incorporate the final examination in ED 202, and again in September on the Friday morning before College begins. Any student, with the Department's permission, may take the Qualifying Examination whether he has been enrolled in ED 201-202 or not; a student who does not qualify during the second-semester examination period may take the Qualifying Examination again in September, although his grade in ED 202 will not be affected.

The Senior Program in English includes a Senior Essay or Honors Thesis and the General Examination. The Senior Essay is a one-term project; the Honors Thesis is a two-term project. Each senior registers for one unit of Senior Essay or Honors Thesis work in the Fall Term; the General Examination is administered at the end of the Winter Term; Honors Theses are completed during Spring Term. Majors who have taken a writing course and an independent study project in writing may petition to undertake a creative writing project as Senior Essay or Honors Thesis. Each Senior is assigned a faculty member for guidance in his essay or honors thesis. The General Examination receives one course-credit. The examination will be based on a general reading list and on the reading lists of the Distribution Courses. Departmental honors will be awarded on the basis of grades in the General Examination and the Honors Thesis or the Senior Essay.

Required for a Major in Drama are (1) ED 241-242 or the Qualifying Examination; (2) Distribution Courses: four courses in dramatic literature including Greek and Roman, Shakespeare, Nineteenth Century, and Modern; (3) Two additional courses in the 40-series (theatre arts); (4) Participation in three production seminars, not necessarily for credit; (5) The Senior Program.

The Senior Program in Drama includes a Senior Project or Honors Project and the General Examination. (See details under English Major.) Each senior is expected to master a general reading list and review the reading lists of his Distribution Courses and his work in other theatre arts courses. Honors will be awarded as for the English Major.

Upper Division Courses

Literature

(ED 201 Interpretation of Literature) To be offered Fall 1973.

ED 202 Interpretation of Literature: Pope, Wordsworth and Hardy
A study of a selected list of major works from representative writers of the eighteenth, nineteenth and twentieth centuries; selected poems of Alexander Pope; selected poems of William Wordsworth; Far from the Madding Crowd, Jude the Obscure, and selected poems of Thomas Hardy.

Mr. Prickitt and Staff

(ED 206 The Early Novel) To be offered in 1974-75.

(ED 207 Nineteenth Century Fiction) To be offered Fall 1973.

ED 208 The Twentieth Century Novel

A study of major achievements in an art form which has directly influenced the shape of contemporary consciousness. Novels by Joseph Conrad, D. H. Lawrence, E. M. Forster, Virginia Woolf, James Joyce, and others will be considered through lectures, discussion, papers and examinations. Open to freshmen who have completed the Writing Program requirement.

Mr. Price

ED 210 Comparative Fiction: Models of Innocence and Madness

An investigation of the prose techniques that support the modern sense of obsession. Readings will be novels and shorter pieces from 19th and 20th Century continental authors: Büchner, Gogol, Dostoevsky, Flaubert, Grillparzer, Kafka, Grass. Enrollment limited to 20: 5 students from each of the four classes, Freshmen must have completed the Writing Program requirement. Permission to be gained from instructor.

Mr. Sparks

(ED 211 Classics of Literature: Greece) To be offered 1974-75.

(ED 212 Modern British Poetry) To be offered Fall 1973.

(ED 303 Introduction to Literature of the English and Continental Renaissance: 1500-1610) To be offered Spring 1974.

ED 304 English Literature in the 17th Century: The Metaphysicals and Milton

An attempt to understand metaphysical poetry through the close examination of three major metaphysicals: Donne, Herbert and Marvell. The second half of the course will be devoted entirely to the study of Milton. Prose and other poetry will be included as background and recommended reading. Limited to 30 students.

Ms. Peters

(ED 305 Poetry and Prose of the English Augustan Age) To be offered Fall 1973.

(ED 306 Poetry and Prose of the Age of Johnson) To be offered 1974-75.

ED 308 Classics of Literature: Rome

A study in translation of Roman epic and satire. The Aeneid of Virgil; the Metamorphoses of Ovid; the Satires and Epistles of Horace; the Satires of Juvenal and Persius; with corollary reading in the lyrics of Catullus and Ovid and the Twelve Caesars of Suetonius.

Mr. Littlefield

(ED 313 Prose and Poetry of the Romantic Period) To be offered Fall 1973.

ED 314 Victorian Poetry

Victorian poetry: Tennyson, Browning, Arnold, a study of selected poems. Through lectures and discussions attempts will be made to locate and analyze some of the major issues of the period.

Mr. Hill

ED 404 Chaucer and the Gawain Poet: Selected Fourteenth-Century Romances
Selected tales from The Canterbury Tales, Troilus and Criseyde, and Sir Gawain and the Green Knight will be read in Middle English. Lectures and discussion.

Mr. Martin

ED 407 Seminar: Restoration Drama

Extensive reading in drama of the period and selected reading in dramatic criticism. Emphasis on the drama and criticism of John Dryden and the comedies of manners of George Etherege, William Wycherley, and William Congreve. Mr. Prickitt

ED 409 Seminar: Charles Dickens

An examination of character, symbol, theme and style in a selection of Dickens' novels, with particular attention to be given to the interactions between the author and the major personalities, concerns and controversies of his age. Mr. Cabot

Dramatic Literature

ED 224 Medieval and Renaissance Drama

English Drama from its beginnings in the Regularis Concordia to its greatest flowering under Elizabeth and James. An investigation of the nature, development and uses of dramatic form through study of the major dramatists, including the Wakefield Master, Lyly, Greene, Marlowe, Jonson, Shakespeare, Beaumont and Fletcher. Complementary readings in theory of drama. Open to freshmen who have completed the Writing Program requirement.

Mr. Halpern

(ED 227 Greek and Roman Drama) To be offered Spring 1974.

(ED 235 Sources of Contemporary Drama) To be offered Fall 1973.

(ED 321 Shakespeare) To be offered Fall 1973.

ED 323 Shakespeare

A seminar in Shakespearean tragedy, which focuses on the themes of order and the devil. (Permission.)

Mr. Pack

ED 326 Modern Drama 1920 to the present

A study of selected playwrights in England and on the continent including Brecht, Beckett, Ionesco, Genet, Osborne, Pinter and others. Two lectures, one discussion per week. Limited to 48 students.

Mr. Volkert

(ED 327 American Drama) To be offered Spring 1974.

Theatre Arts

(ED 241 Forms and Styles of the Theatre: An Historical Approach) To be offered Fall 1973.

(ED 242 Forms and Styles of the Theatre: An Historical Approach) To be offered Spring 1974.

(ED 245 Style: Acting and Directing) To be offered Fall 1973.

(ED 249 Style: Design [Stage and Scene]) To be offered Fall 1973.

ED 250 Continuation of ED 249

A series of readings, discussions, exercises, and projects in which historical and contemporary approaches to mounting plays are examined. Emphasis is on scenic forms, materials and techniques as interpretive elements in production planning.

Mr. Potter

(ED 251 Style: Design [Costume]) To be offered Fall 1973.

(ED 252 Style: Design [Lighting]) To be offered Spring 1974.

ED 346 Style: Acting and Directing

A seminar in which a Greek tragedy, a Shakespearean tragedy, a Shakespearean comedy, a comedy of manners, and a melodrama will be studied in relation to acting and directing problems. Each student will take part as an actor or director in a final project of his choice. Performance of these projects will be open to the public. From this course 500 projects or senior projects may be developed. (Permission.) Mr. Volkert

Production Seminars:

The Department offers a production seminar in conjunction with each major production. Students enrolled in these seminars take part in a two or three week period of intensive study of the play and then participate in the production of the play. Each student, with the approval of the department, defines the nature of his participation: actor, stage manager, critic, literary historian, or designer, etc. Participation may vary from playing a major role to writing an extended critical essay about the playwright. Open to freshmen and upperclassmen. (Permission.)

(ED 441 Acting and Directing) To be offered Fall 1973.

(ED 442 Production) To be offered Fall 1973.

ED 443 Acting and Directing

Ben Jonson's Volpone. Copies of the play will be placed on reserve in the College library on November 27. Readings will take place January 8 and 9 at 3:30-5:30 P.M. in Wright Theatre.

Mr. Teush

ED 444 Production

Mr. Potter

Cinema

(ED 451 Film-Making)

Writing

(ED 260 Factual Writing) To be offered Fall 1973.

ED 270 Prose Fiction II (Also offered Fall 1973.)

With the advice and editorial assistance from the instructor, students will undertake more ambitious writing projects in order to develop their talents and to broaden their sense of technique and style. Students may choose to write stories, novelettes, novels, or, in special cases, plays. Limited enrollment. Open to freshmen who have completed Prose Fiction I. (Permission.)

Mr. Clagett

(ED 275 Poetry II) To be offered Fall 1973.

ED 279 Techniques of Research

This course is designed to train students in the art of research for material to be used in various kinds of advanced writing, including biography, nonfiction, fiction, and scholarly writing. The choice of the topic is open to the student. Limited enrollment by permission.

Mr. Clagett

Advanced Writing: Students may undertake advanced writing at the 500 or 700 levels. Candidates are asked to submit a description of their project and samples of their writing to a departmental committee two weeks before registration.

Special Projects

The Department will consider applications from qualified students who wish to undertake special projects in literature, dramatic literature, writing, directing, theatre arts, or film. A student proposing to undertake such a project should submit a detailed proposal to his adviser two weeks prior to registration.

ED 500, 520, 540, 560 Special Projects (Also offered Fall 1973.)

Staff

Senior Program

Students majoring in the Department are required to undertake a one or two-term senior project. A student hoping to undertake a two-term honors project should normally submit an application in writing to his adviser at least two weeks prior to registration for the term during which he intends to begin his project. Intentions for one-term projects should be submitted in writing for approval no later than the end of the second week of the term in which they are to be undertaken.

ED 700, 720, 740, 760 Senior Projects (Also offered Fall and Winter 1973-74.)

ED 705 General Examination

Required of all majors. (See description of major.)

FRENCH

The French Department hopes to develop students' interest and competence in linguistic communication, ability to read and criticize literature in French, and familiarity with the major themes and perspectives of the French-speaking world.

We consider command of the French language to be the essential ingredient and prerequisite to serious and successful pursuit of such aims. On the other hand, we recognize that an individual student may choose to pursue one of the interrelated areas in particular, and that in any case a successful major in French will benefit not only from these interrelations but from work in related areas of intellectual activity, such as other languages and literatures, fine arts, history, philosophy, sociology, etc. Accordingly, requirements for the major are designed to develop a student's ability to read and discuss relatively complex literary and social documents, and thereafter to leave him sufficient freedom to pursue his own particular bent, in consultation with his adviser.

Required for the major: FR 205-206 or its equivalent; four courses at the 300 level or above. Total of not less than 10 courses or more than 14.

Language

(FR 101 Beginning French) To be offered in 1973-74.

FR 102 Beginning French

Oral inductive approach combined with more emphasis on the reading and writing aspects of the language. Students are asked to participate more actively. Language Laboratory still intensively used. Three class meetings and two drill sections per week.

Mr. Barenbaum

(FR 109 Intermediate French) To be offered in 1973-74.

(FR 110 Intermediate French) To be offered in 1973-74.

(FR 201 Syntax, Reading, Oral Practice and Writing) To be offered in 1973-74.

FR 202 Syntax, Reading, Oral Practice and Writing

Reading and discussion of modern literature and a few articles from current French periodicals. Review of grammar according to the class's needs. Students will write a few compositions. (For students with 3 or 4 years of average preparation in the language.)

Mr. Barenbaum and Staff

FR 205 Advanced Oral and Written Expression (Also offered Fall 1973.)

A course designed to increase and perfect the student's ability to express himself in spoken and written French. Emphasis will be placed on diction, clarity, variety, and the expression of abstractions. Sections limited to 15 students.

Mr. Knox and Staff

FR 206 Advanced Oral & Written Expression

Continuation of French 205 - Greater emphasis on use of the language, via discussion of articles in L'Express, to which the students will subscribe. Also readings and discussion of the play to be staged in the French production seminar. (FR 205 or permission.)

Staff

Literature

(FR 209 Introduction to Critical Reading) To be offered in 1973-74.

FR 210 Introduction to Critical Reading

Study of the elements and structures of the literary work, from a generic rather than an historical viewpoint: prose narrative forms. The student will develop and demonstrate his ability to criticize literature in class discussions and papers. Staff

(FR 211 Creative Writing in French) To be offered in 1974-75.

(FR 309 The Renaissance) To be offered in 1974-75.

(FR 310 Moralistes and Philosophes) To be offered in 1974-75.

(FR 312 The French Novel from La Fayette to Laclos) To be offered in 1973-74.

FR 315 Nineteenth Century French Novel

Balzac and Stendhal as creators of modern realism. Discussion of character, attitude, and relationships of the dramatis personae and their connections with political and social conditions as well as the literary form of their consciousness of reality.

Ms. Stern

(FR 316 Nineteenth Century Poetry) To be offered in 1974-75.

FR 318 Modern French Poetry

Selected texts of twentieth-century poets, including Apollinaire, the Surrealists, Eluard, Ponge, Michaux, and others.

Ms. Rifelj

(FR 319 The Modern Novel Between The Wars) To be offered in 1974-75.

FR 320 The Contemporary French Novel

Evolution of the French Novel in the XXth century. Readings in Mauriac, Sartre, Sarraute, Cl. Simon and Le Clézio in the light of critical theories dealing with problems of "point of view," characterization, plot development and social involvement.

Mr. Simon

FR 321 French Classical Theatre

An introduction to the theatre of Corneille, Racine and Molière. Attention to utilization of prevailing theatrical conventions by the playwrights. Study of character, action and structure, with emphasis on their importance to tragic and comic theory.

Mr. Knox

(FR 331 Images of Women From Corneille to Laclos) To be offered in 1973-74.

(FR 333 The Structures of Autobiography) To be offered in 1974-75.

(FR 334 Medieval French Poetry) To be offered in 1974-75.

(FR 335 Short Fiction in the Nineteenth Century) To be offered in 1974-75.

(FR 350 French Cinema) To be offered in 1973-74.

(FR 411 French Civilization) To be offered in 1974-75.

(FR 412 French Civilization) To be offered in 1974-75.

(FR 413 Aspects of Contemporary France) To be offered in 1973-74.

FR 442 Workshop in French Theater

Group study of a play in French, concentration on the play itself, the problems of production, and the presentation of the play to various audiences (high school, other colleges, Middlebury). Students will participate as actors and technicians and will have an active "teaching" role to play as they explain the play and the production to their audiences. Molière: L'Avare. (Seminar open to 15 students by permission.)

Mr. Barenbaum

FR 500 Independent Projects

Qualified undergraduates may be permitted to undertake a special project in reading and research under the direction of some member of the department.

Staff

FR 700 Senior Research

Staff

GEOGRAPHY AND GEOLOGY

Geography

The essence of geographic study is the analysis of phenomena in a spatial context, especially the "where" and "why" of human activities. In their attempt to explain the differences which exist from place to place over the earth's surface, geographers collect, analyze, and integrate data from both the physical and social sciences. They examine such physical elements as land-forms, climate, soils, and vegetation and interpret them in terms of the distribution of people, their ways of making a living, and the social and political patterns they have developed. Because man's perception of the environment and his interactions with it are constantly changing, geography seeks to understand how present world patterns have evolved from the past and how they might be modified in the future.

Required for a Major: GG 101, GG 102, GG 201, GG 202, GG 302, GG 401, one regional course numbered from GG 311 through GG 317, and Senior Research (GG 700). In the Spring Term of their Junior year, majors will be required to select a topic for a senior thesis in consultation with a departmental adviser. The Fall and Winter Terms of the Senior Program are devoted to the writing of the thesis and the Spring Term is devoted to its oral presentation, defense, and final editing for submission no later than May 1. The Department also participates in the interdisciplinary Environmental Studies major through the Human Ecology option.

Cognate courses for a Major in Geography range over a broad field and should be selected from other departments according to one's interest in Geography, and with

the approval of the adviser. Students contemplating graduate studies and/or professional careers in city and regional planning may also avail themselves of Independent Projects in Spatial Analysis and Human Ecology (GG 500) designed to meet their special needs.

(GG 101 Introduction to Spatial Analysis I: The Developed World) To be offered
Fall 1973.

GG 102 Introduction to Spatial Analysis II: The Underdeveloped World

A survey of the physical and cultural factors which influence the distribution of man and his activities on the surface of the earth. Skills developed in GG 101 are applied in the analysis of the countries and regions of Asia, Africa, and Latin America. (GG 101 is a prerequisite for GG 102.) Mr. Illick

(GG 201 The Environment of Man: The Physical Setting) To be offered Fall 1973.

GG 202 Spatial Analysis of Economic Activity

An examination of the origins, nature, and distribution of man's economic activities over the world. The evolution of subsistence, commercial, and planned economies will be studied in a spatial context. Field trips. (GG 101.) Mr. Malmström

(GG 211 The Environment of Man: The Urban Setting) To be offered Fall 1973.

GG 302 Techniques of Spatial Analysis: Remote Sensing and Cartography

An introduction to the history, compilation, design, and construction of maps. Training will be given in the techniques of preparing maps from field surveys, air photographs, library, and statistical and computer data. Particular attention will be given to the interpretation of images produced by radar, sonar, infrared and other sensors. Field sketch and overlay maps as well as three-dimensional diagrams and models will be produced. 3 hrs. lect., 3 hrs. lab. (GG 101.) Limited to 20 students. Mr. Illick

Seminars in Spatial Analysis: Contemporary economic, social, and political problems of major world regions will be systematically examined in a spatial and environmental context. Limited to 20 students. (GG 101.)

GG 311 Anglo-America

Mr. Hovinen

GG 312 Latin America

Mr. Malmström

(GG 313 Europe) To be offered in 1973-74.

(GG 314 Africa South of the Sahara) To be offered in 1973-74.

(GG 315 Soviet Union) To be offered in 1974-75.

(GG 316 Middle East and North Africa) To be offered in 1973-74.

(GG 317 South and East Asia) To be offered in 1974-75.

(GG 401 Spatial Analysis of Political Activity) To be offered Fall 1973.

GG 412 Applied Spatial Analysis: Principles of Planning

An examination of the nature of the planning process. A study will be made of land-use planning at various levels (interstate, state, regions within states, and local). The planning system in the United States will be compared to that in Sweden. Students will have an opportunity to apply planning techniques to problems in Vermont. (GG 101 and GG 201, or permission.) Mr. Hovinen

GG 500 Independent Projects in Geography (Also offered in Fall 1973.)

A course arranged to fulfill the research needs of students majoring in Geography.

Staff

GG 704 Senior Seminar

Staff

Geology

Students can enter the program in geological sciences through any of four different courses: Global Tectonics, Elements of Oceanography, Geochemistry of Earth Materials, or Environmental Geology. They then may concentrate in these or other areas depending on where their interests develop. Interdisciplinary concentration is encouraged. Work in the Geological Sciences culminates in a 3 unit senior thesis that consists of an original contribution based on student field and/or laboratory work.

Required for the major: No courses are required of any student entering the program. Concentration is any of several areas such as geophysics, oceanography, geochemistry or environmental geology will include at least 12 course credits, but not more than 20. Students are expected to take in addition one year of college mathematics, physics, and chemistry or their equivalents. Advanced courses in these and selected other fields may be counted toward the required minimum 12 course credits. All Area Concentrations will include a three course unit senior thesis.

GG 252 Environmental Geology

The geological environment viewed in terms of its relationship to the ecology of man. Principles of geomorphology and hydrology, use and misuse of natural resources, problems of prediction and control of natural disasters will be evaluated to offer solutions to such contemporary problems as erosion, waterway control, pollution and regional planning. Laboratory: field and laboratory examination of environmental problems. 3 hours lecture, 4 hours lab.

Mr. Baldwin

(GG 261 Elements of Oceanography) To be offered Fall 1973.

(GG 271 Geochemistry of Earth Materials) To be offered Fall 1973.

GG 272 Global Tectonics

Sea-floor spreading and continental drift, origin and evolution of mountain systems, and concepts of plate tectonics viewed in light of recent advances in the geology and geophysics of ocean basins and continents. Laboratory: Regional tectonic synthesis, field problems in Vermont geology. 3 hours lecture, 4 hours lab.

Mr. Coney

(GG 361 Sedimentary Processes and Paleontology) To be offered Fall 1973.

GG 362 Principles of Stratigraphic Analysis

Origin, succession and correlation of layered rocks. Application of geologic, geophysical and geochemical methods to establish stratigraphic sequences in space and time and thus to reconstruct geologic history. Study of Quaternary to Cambrian strata ranging from deep sea to continental deposits with emphasis on continental margins. Most field work in Cambrian and Ordovician strata of the Champlain Valley and Green Mountains. 3 hrs. lecture, 4 hrs. lab.

Mr. Folger

(GG 381 Tectonics) To be offered Fall 1973.

GG 392 Analytical Petrology

An inquiry into the origins, evolution, and global tectonic setting of igneous rocks and rock associations. The laboratory will be directed towards collection of data (by field mapping, thin section study, and X-ray methods) necessary for understanding the igneous rocks of northern New England. 3 hours lecture, 4 hours laboratory. Mr. Creasy

GG 452 Quaternary Stratigraphy and Surficial Processes

Interpretation of climatic fluctuations during the last 5 million years through study of oceanic, lacustrine, and glacial sediments. Oceanic strata compared to continental glacial and interglacial deposits with respect to the fossil, paleomagnetic, and radio-metric record. Field work in depositional processes and stratigraphy of glacial, marine, and lacustrine sediments of the Champlain Valley and Green Mountains. 2 hrs. lecture, 5 hrs. lab. Mr. Folger

(GG 462 Evolution of Ocean Basins) To be offered in 1973-74.

GG 482 Advanced Tectonics and Geophysics

Principles of tectonic analysis and regionalization; discussion of regional tectonic processes in space and time; methods and results of geophysics and the bearing of these results on crustal tectonic evolution. Laboratory; compilation and interpretation of regional tectonic maps; geophysical investigation of field problems. (Advanced work in geological science, mathematics or physics.) 1 hour lecture, 6 hours lab. Mr. Coney

(GG 491 Advanced Geochemistry and Metamorphic Petrology) To be offered Fall 1973.

GG 550 Readings and Research

Individual or group independent study, laboratory or field research projects, readings and discussion on timely topics in earth and environmental science. Staff

GG 750 Senior Research

A three unit senior program dedicated to original research in geological science resulting in a written thesis which must be orally defended.

GERMAN

Departmental students are normally expected to take eight courses in German Literature. Since all higher courses will be conducted in German, completion of German 202 or its equivalent is prerequisite to acceptance into the Department. In their junior and senior years qualified students may undertake approved independent research. It is the department's expectation that all majors will have had at least one semester in a German-speaking country by the time they graduate. Junior majors will normally spend the second semester at the Johannes Gutenberg-Universität in Mainz. There is no comprehensive examination in the senior year.

(GN 101 Elementary German) To be offered Fall 1973.

GN 102 Elementary German

The course consists of three lectures, three drills and laboratory. Lectures. The lectures pre-drill the student, which is to say, the student is guided through the exercises that he is to prepare for the following day's drill. Drills. Drilling is done in groups of approximately ten students. Since they have been through the exercises in lecture, students are expected to display absolute and automatic control of drill assignments. Mr. Sparks, Mr. Vail & Staff

(GN 201 Intermediate German) To be offered Fall 1973.

GN 202 Advanced German

The course meets three times a week in sections of approximately ten students. Modern German texts will be read and interpreted, and the student will be introduced to the methods of literary analysis. The course will further increase the student's fluency in spoken German and his facility in reading. Staff

(GN 301 Modern German Literature) To be offered 1974-75.

(GN 305 The German Novelle) To be offered 1974-75.

(GN 306 The German Novelle) To be offered Fall 1973.

(GN 307 The German Novelle) To be offered Spring 1974.

GN 308 Exercises in Critical Writing

This course will develop the students' abilities in writing German by directing them to the analysis of short works of fiction. Each student will write ten to twelve short critical papers during the semester; emphasis will be placed on clarity, precision, and the achievement of a natural style in German. Miss Driver

(GN 310 German Lyric Poetry) To be offered 1974-75.

(GN 401 The Eighteenth Century) To be offered Fall 1973.

(GN 402 The Age of Goethe and Schiller) To be offered Spring 1974.

(GN 406 Romanticism) To be offered 1974-75.

GN 407 Romanticism

This course will provide the student with techniques for examining a period in depth. The emphasis will be on narrative forms. The course will give the student a basis from which to understand romantic themes and forms as they are carried forward into the twentieth century. Readings will include works by E.T.A. Hoffmann, Eichendorff, Tieck, Wackenroder, Novalis, Brentano and von Arnim. Mr. Vail

(GN 410 Seminar: German Drama) To be offered Fall 1973.

(GN 414, GN 415 Seminar: The German Novel) To be offered 1974-75.

GN 500 Independent Study

HISTORY

The History major combines an introduction to several areas of historical knowledge with intensive training and practical work in historical research. Majors must take at least one semester lecture course in early history, choosing from the following: HI 103, 205, 207, 313, 325, 326, 327, 328, and must also take at least two semester courses outside of their main field of concentration. (The fields are defined as Europe, America, and Non-Western.) The same course may be counted towards a fulfillment of both these requirements. Each major must also take a Research Seminar (HI 401-420), and a Readings course (HI 421-430) by the end of his junior year. Senior majors, having chosen a topic the previous spring, take Independent Study, as described below under HI 700, and may, if they wish, enroll for the senior seminar in the spring. With departmental permission, certain cognate courses (normally not exceeding two) may be counted for credit towards a major in History.

Required of all History majors: A minimum of ten courses, of which at least eight must be below the 700 level, including a Research Seminar and a Readings course; there must also be a senior project.

(HI 103 Crises in European History) To be offered Fall 1973.

HI 104 Modern Revolutions

A comparative study of revolutions and radical mass movements in Europe, Asia, Africa and America, and an analysis of the revolutionary ideology of Marxism. The course explores the problems of trying to conceptualize revolution and, through a study of some of the great revolutions starting with that in France in 1789, points toward the possibility of establishing some comprehensive generalizations about revolution. Lectures will be given by departmental members who specialize in the various areas. (Primarily for freshmen and sophomores; juniors and seniors admitted by permission only.)
Miss Lamberti and Staff

(HI 203 United States History, 1607-1970) To be offered Fall 1973.

(HI 205 Early History of Africa) To be offered Fall 1973.

HI 206 Modern Africa

A survey of the major themes in the history of sub-Saharan Africa from the beginning of the colonial period to the present. Emphasis will be placed on the interaction of African and European ideas in the period of dynamic modernization and the assertion of African self-determination.
Mr. Holmes

(HI 207 Early History of East Asia) To be offered Fall 1973.

HI 208 Modern East Asian History

An examination of the role of China and Japan in the modern Asian revolution. The course will deal with the challenge posed by western expansion, economic and cultural, the ways in which China and Japan have striven to maintain their independence of the west, and the role played by tradition both in helping and hindering this effort.
Mr. Clifford

(HI 301 Economic History of the United States) To be offered 1975-76.

(HI 303 The United States in the 19th Century, 1801-1861) To be offered Fall 1974.

HI 304 The United States in the 19th Century, 1860-1900

A political and social history of the United States during the latter half of the 19th century. Emphasis will be on the Civil War and Reconstruction, the economic changes that produced the so-called Gilded Age, and the various "responses to industrialism" that culminated in the Populist and Progressive reform movements of the late 19th and early 20th centuries. While the course is a continuation of HI 303, it is an independent unit and there are no prerequisites. Two lectures and one discussion. Mr. Catton

(HI 305 Twentieth Century America) To be offered Fall 1973.

(HI 306 Twentieth Century America) To be offered Spring 1974.

(HI 307 Black History) To be offered Fall 1973.

HI 309 History of American Education

This course will treat the history of American education as an integral part of American social and intellectual history. Major historical events such as the rise of the common school, the emergence of the modern university, and the development of progressive education will be studied through the use of both primary and secondary sources. The course will be chronologically arranged from colonial times to the present. (This course will receive Teacher Education credit.) Mr. Stameshkin

(HI 313 History of Russia to 1725) To be offered Fall 1973.

HI 314 History of Russia to 1953

A study of Russian history from 1725 to the death of Stalin, stressing the major internal forces of modernization, as well as the impact of the western example. Mr. Pereira

(HI 315 History of Modern Europe, 1815-1890) To be offered Fall 1973.

HI 316 History of Modern Europe, 1890-1950

Continues the approach of HI 315. Special attention to the rise and nature of modern totalitarianism. Miss Lamberti

HI 318 English History as a Background for English Literature

From the Elizabethan period to the first World War. Stress will be on intellectual and social history: i.e., on the development of forms of society and thought that made it useful for authors to treat literary themes at particular times in particular ways.

Mr. Tillinghast

(HI 325 The Civilization of the Dark Ages) To be offered Fall 1974.

HI 326 The Medieval Outlook, 1050-1300

During the eleventh century, something happened to the peoples in Western Europe: an outburst of energy in every field transformed them within 200 years from semi-

barbarians into an alert and driving group of cultures. Then the advances began to slow down. The course will try to find out why. Mr. Tillinghast

(HI 327 The Renaissance) To be offered Fall 1973.

(HI 328 The Age of Reformation) To be offered Spring 1974.

HI 401-20 Research Seminars

The purpose of the research seminar is to introduce the student to methods of research and historical writing. The first few weeks are spent in reading in the area of the course in class, and in an introduction to bibliographical problems. During the rest of the course the students write a long paper on a subject of their choosing. The research seminar is required of majors in their junior year, and is open to others by permission. The department may permit a student to write an equivalent research paper in a field not covered by the pro-seminars; in this case he should register for HI 500.

Offered in Spring 1973:

HI 409 American Colonial and Revolutionary History

This course will introduce students to some of the problems of working with primary sources in the period of Early American History. Students will spend most of the term doing original research on a particular problem in this period, and will present their findings by the end of the term in the form of a long paper. Mr. Stameshkin

HI 414 The Writing of Marxist History

An attempt to explicate and apply the principles of Marx's philosophy of history; after the class completes the program of preliminary readings in Marx, each student will select a research topic in the modern European field, and write a paper in which these principles will be tested. Mr. Pereira

HI 421-30 Readings Courses

Unlike the offerings below the 400 level, which are primarily lecture courses, the readings courses are smaller group discussions of particular periods or particular topics. There are no prerequisites and they are open to all students, although in case of overcrowding, history majors will be given priority. (Required of majors prior to the end of junior year.)

Offered in Spring 1973:

HI 424 Reformers and Revolutionaries in Modern Asia

A study, largely through the medium of biography, of leaders of change in modern Asia in the intellectual, political, and military spheres. The focus will be primarily, but not exclusively, on China and Japan, and will consider among others, Sun Yat-sen, Tojo Hideki, Ho Chi Minh, Chou En-lai, and Gen. Joseph Stillwell. Mr. Clifford

HI 425 Readings in the American Civil War

An examination and discussion of several of the major interpretations of slavery, the sectional conflict, the causes of the Civil War, and the war years. Mr. Catton

HI 426 The Gay Nineties? America at the Crossroads, 1890-1900

One of the most important decades, still often referred to as the "Gay Nineties"; the

course will offer a more realistic view of the period: five years of depression, strikes and labor confrontations, rural poverty and dislocation, which led to the formation of a militant Populist party, and the war that symbolized America's rise to world power. With the announcement that the frontier was gone, many Americans saw the uniqueness of America fading. The amazing number of new immigrants who arrived in this decade further changed the face of America. Americans searched for a new self-image in this decade of turmoil.

Mr. Stameshkin

HI 500 (Also offered Fall 1973.)

Special research projects (Permission only.)

Staff

HI 700 Independent Study (Also offered Winter 1974.)

Seniors will choose, with departmental advice and approval, from among the following types of Independent Study projects: (1) a two-term thesis, departmental or interdepartmental, the work to be done in the fall and winter terms unless individual permission is given by the department for another schedule; (2) an interdepartmental essay, jointly approved and directed by an adviser in both departments; (3) an historiographical essay; (4) a bibliographical essay; (5) an oral history project; (6) a translation project; (7) a conventional historical research paper; (8) practice teaching in history, in conjunction with the Teacher Education program, in local secondary schools, with a written report to be turned in to the History Department at the end of the semester; and (9) HI 705, below. Eligibility for honors will normally be confined to students completing the two-term thesis, although outstanding performance in any of the other undertakings may result in permission to continue and complete it during a second term and become eligible for honors.

HI 705 Teaching Assistantship (Also offered Fall 1973.)

Teaching assistance in discussion sections of certain lecture courses. Permission of the course instructor is required.

HI 710 Topics in Comparative History

Senior seminar. Readings and discussions in problems chosen by staff and students, encouraging a comparative study of problems common to different periods and different fields.

Staff

MATHEMATICS

The Major includes work in analysis through advanced calculus, a year of modern algebra, plus work in several elective fields. Probability and statistics, topology and geometry, real and complex analysis, number theory and advanced algebra and an introduction to digital computers are available to all majors. Each major will make a careful choice of electives with the help of his adviser in order best to fulfill his particular mathematical needs.

Advanced placement is offered freshmen whose secondary training indicates they can successfully take the sophomore course.

Seniors must register for MA 704 in the Spring Term.

Required for the Major: MA 112, MA 113, MA 201, MA 202, MA 301, MA 302,

MA 401, MA 402, three electives in the Department and MA 704. Physics is recommended and, under special circumstances, certain courses in other departments may serve in lieu of one or two of the required departmental electives.

(MA 101 Introduction to Finite Mathematics) To be offered Fall 1973.

(MA 109 Introduction to Modern Mathematics) To be offered Spring 1974.

MA 112 Mathematical Analysis-I (Also offered Fall 1973.)

Introductory analytic geometry and calculus; designated for students with four years of secondary school mathematics. The differential calculus of algebraic functions and applications; the indefinite and definite integral, area under a curve. Mr. Ballou

MA 113 Mathematical Analysis-II (Also offered Fall 1973.)

A continuation of MA 112; may be elected by freshmen who have had an introduction to analytic geometry and calculus in secondary school. Applications of integration to volumes of revolution, length of arc, surface of revolution, pressure, and work; the calculus of the elementary transcendental functions; hyperbolic functions; polar coordinates; determinants. (MA 112 or permission.) Staff

MA 201 Mathematical Analysis-III (Also offered Fall 1973.)

The calculus of functions of more than one variable. Introductory vector analysis, analytic geometry of three dimensions, partial differentiation, multiple integration and applications. (MA 113 or permission.) Mr. Olinick

MA 202 Mathematical Analysis-IV

Infinite series and an introduction to ordinary differential equations. Convergence of numerical series; Maclaurin and Taylor series; first and second order differential equations, linear differential equations with constant coefficients, applications. (MA 113 or MA 201.) Mr. Ballou

(MA 301 Linear Algebra) To be offered Fall 1973.

MA 302 Abstract Algebra I

An introduction to the study of groups, rings, and fields. Algebraic structure; transformations and permutations, cosets and quotient groups; ideals, quotient rings; field characteristics. (MA 202 or permission.) Mr. Peterson

(MA 310 Probability) To be offered in 1974-75.

(MA 311 Statistics) To be offered in 1974-75.

MA 315 Mathematical Models in the Social and Management Sciences

An introduction to the role of mathematics as a modeling tool and an examination of some mathematical models of proven usefulness in problems arising in the social and management sciences. Topics will be selected from the following: axiom systems as used in model building, optimization techniques, linear and integer programming, theory of games, systems of differential equations, computer simulation, stochastic processes. Specific models in political science, ecology, sociology, anthropology, psychology, and economics will be explored. (Permission.) Mr. Olinick

(MA 321 Elementary Number Theory) To be offered in 1973-74.

(MA 331 Introduction to Digital Computers) To be offered in 1973-74.

(MA 401 Advanced Calculus) To be offered Fall 1973.

MA 402 Advanced Calculus

Further topics in the calculus and real analysis. Fundamental concepts of real function theory, divergence and curl, line integrals, Green's theorem, the Stieltjes integral, infinite series, power series, Fourier series, improper integrals. (MA 202.) A continuation of MA 401.

Mr. Bielli

(MA 411 Elementary Topology) To be offered Fall 1973.

(MA 421 Modern Geometry) To be offered Spring 1974.

MA 431 Complex Analysis

An introduction to functions of a complex variable. Mappings of the complex plane, analytic functions, Cauchy Integral Theorem, and related topics. (MA 202 or permission.)

Mr. Carruth

MA 500 Advanced Study (Also offered Fall 1973.)

Individual study for qualified students in more advanced topics in algebra, number theory, real or complex analysis, topology. Particularly adapted for those who enter with advanced standing. (Permission.)

Staff

MA 704 Problem Seminar

Each student is required to complete problems designed to bring together the many facets of Mathematics investigated in the previous 3 1/2 years. Each student presents orally at least two problems during the term. Required of mathematics majors.

Mr. Peterson

MUSIC

The offerings of the Music Department focus on three areas of the discipline: 1) The vocabulary and theory of music. 2) its historical development, 3) its creative aspects--performance and composition.

The relative emphasis on any of these three will vary for the individual music major according to his talents, interest and needs. Independent study consists of advanced work in one or more of these areas as determined by the department in consultation with the student.

It is generally assumed that the major will take MU 101 (Music as Design), MU 102 (Music as Idea and History), MU 206, MU 207 (Performance), MU 209, MU 210 (Theory), MU 309, MU 310 (Analysis), and three other departmental offerings.

Any of these requirements may be waived or changed if the department feels the best interests of the student are served.

MU 101 Music as Design (Tentatively offered also Fall 1973.)

This course is an introduction to the musician's view of the possibilities in his materials

and deals with music as a creative act. Lectures are devoted to the questions "How does one listen to a piece of music? What is to be asked about a work or body of works?" Students are asked to respond to assigned pieces, keeping a written record of the development of their musical understanding. In order to impart a sense of what problems are involved in the creation of music, they are asked to compose original short compositions using noises, gestures and voices and other easily accessible things as their materials.

Mr. Todd

(MU 102 Music as History) To be offered Spring 1974.

(MU 110 A Survey of Musical Style) Tentatively to be offered Spring 1974.

(MU 206 Performance) To be offered Fall 1973.

MU 207 Performance

The focus of this study is the development of musical understanding and expression through active participation in making music. As a laboratory course, the primary work takes place in tutored private practice and ensemble rehearsal; choir, orchestra, chamber groups and individual instruments. (Permission.) Mr. Fanning and Staff

(MU 209 Theory) To be offered Fall 1973.

MU 210 Theory

Continuation of MU 209.

Mr. Todd

(MU 240 Aesthetics and Music) To be offered Fall 1973.

(MU 250 Artistic Development in the Individual Composer) Tentatively to be offered Fall 1973.

(MU 260 Words and Music)

MU 301 Electronic Music

The study and composition of musical structure using synthesized and concrete sound events generated in an electronic studio. Students are instructed in the use of the equipment, the means for collecting and manipulating sound, and in tape-mixing techniques. Goal of the course is finished tapes of pieces. (See Department Chairman - permission required.)

Mr. Todd

(MU 309 Analysis) To be offered Fall 1973.

MU 310 Analysis

Continuation of MU 309.

Mr. Kurtzman

(MU 325 Music in the 20th Century) To be offered Spring 1974.

(MU 350 The Dramatic in Music) To be offered Fall 1973.

(MU 401 Historical Research Seminar)

Applied Music

The aim of the Department is to present music for its value as literature and as a record of one aspect of human achievement, not as professional training. We strongly encourage students to improve performing techniques as a necessary means of cultivating the art. The College will assist the student as far as possible in securing adequate instruction when not provided by the regular staff.

Students who wish to have private instruction in piano, organ, violin, viola, classical guitar, recorder, flute, voice, clarinet, oboe, or saxophone should contact the Department during registration.

Fees are to be paid to the Cashier's office at the beginning of each term. No rebate is allowed for lessons missed except in the case of continued illness. Applied Music instruction consists of 1 lesson weekly; fee \$105 per semester for all instruments except recorder which is taught in consort. Fee for recorder is \$65 per semester.

Private Instruction in Piano	Mrs. Kurtzman
Private Instruction in Organ	Mr. Fanning
Private Instruction in Violin and Viola	Mr. Glick
Private Instruction in Classical Guitar	Mr. Rhinelanders
Private Instruction in Recorder	Mr. Skrobela
Private Instruction in Flute	Mr. Powell
	Miss Scoones
Private Instruction in Voice	Miss Sliker
Private Instruction in Woodwinds	Mr. Kimbell

Music Library. The Christian A. Johnson music library contains several thousand records, scores, books, and a collection of chamber music. Listening facilities in the library are available to anyone from the college community.

Practice Facilities. Practice rooms with pianos are available for individual and group rehearsal. Organs: Walcker (1969) mechanical action, 15 ranks; and Gress-Miles (1970) 48 ranks. Application should be made to the secretary of the music department.

College Orchestra. Weekly rehearsals leading to the performance of music from all periods. Performance by small ensembles is encouraged. All instrumentalists are urged to audition. Apply to secretary of music department. Mr. Todd

College Choir

The College Choir sings at Chapel Services and special concerts on and off campus. In keeping with the educational intent of the choral program, repertoire for all performing groups is as historically inclusive and demanding as possible. Performance in languages other than English is stressed. Audition required, open to all students without prerequisite.

Mr. Fanning

Recitals

Regularly scheduled recitals and lectures are open to the public.

PHILOSOPHY

Non-majors: Most of the Philosophy Department courses are open to students who are not majors and who have had little or no previous work in philosophy. PA 102, PA 115-116 are the general introductions to the field and are open to students in all classes. Courses in the 200 range are introductions to specialized areas of philosophical study which do not require particular competences though students who have done work in education, religion, or the arts will find their studies in those areas of assistance. Except as noted, 300 level courses are generally open to students but they suppose a higher level of sophistication than the 200 level courses and are not normally open to freshmen. 400 level courses are normally open only to majors. Non-majors with a previous background in philosophy may elect a 400 course but they should consult with the instructor.

Major program: Majors will elect ten courses in the department which may include PA 115 and 116. All majors must take PA 400 in their junior year. Cognate courses particularly in the areas of political science and religion may be substituted for two courses with prior permission. Majors must elect: one course in Ethics and Social Philosophy (PA 300-320); one course in Philosophy of Science and Theory of Knowledge (PA 350-370); one course in Studies in the History of Philosophy (PA 400-420) and the Senior Seminar (2 course units) in Contemporary Philosophy.

Honors candidates will do a 500 project in the Winter Term of Senior Year and may substitute under exceptional circumstances a second term of 500's work for the second term of the Senior Seminar. Students must have a B average in all work in the department during their junior year and first term of senior year to be permitted to undertake an Honors project. 500 projects are open only to philosophy majors and they must have attained an average of B in all course work within the department.

(PA 102 Philosophical Problems) To be offered Fall 1973.

(PA 115 The Philosophical Tradition: Greek and Medieval) To be offered Fall 1973.

PA 116 The Philosophical Tradition: From the Scientific Revolution
Traces the impact upon theories of knowledge and metaphysics of the development in natural science. General reading in the history of philosophy will serve as background to in-depth study of such figures as: Bacon, Descartes, Locke, Berkeley, Hume or Kant.
(Two lectures and one discussion.) Mr. Bigelow

(PA 210 Philosophy of Education) To be offered in 1974-75.

(PA 213 Philosophy of Religion) To be offered in 1973-74.

PA 217 Philosophy of Art

An investigation of the phenomenology of various arts (the expressive character of various media); the relation between art and its history; the problems of artistic criticism.
Mr. O'Brien

PA 218 Introduction to Modern Logic

Topics covered will include truth functions, quantifiers, identity and descriptions. A system of deduction will be introduced and its soundness and completeness proved. No previous knowledge of logic required.

Mr. Temin

(PA 222 Hegel and the Nineteenth Century) To be offered 1973-74.

Ethics and Social Philosophy

Courses numbered in the range PA 300 - 320 fall in the general area of ethics, social philosophy and theory of value. Offerings may change from time to time and courses will be alternated as indicated.

(PA 307 Ethics and Analysis) To be offered 1973-74.

PA 309 Philosophy of Law

A study of various attempts to understand the essence of law, concentrating on the opposition between theories of natural law and of legal positivism. Special emphasis will be given to the problem of obligation to obey the law. In addition to important historical figures, contemporary legal theorists such as H. L. A. Hart and Lon Fuller will be read. Specialized topics such as the legal enforcement of morality, punishment and civil disobedience will be considered at the conclusion of the course. (Offered in alternate years.)

Mr. Bates

Philosophy of Science and Theory of Knowledge

Courses numbered in the range PA 350 - 370 fall in the general area of theory of knowledge or epistemology. Problems of knowledge, proof and perception have been particularly central to philosophical concerns in the modern period. Students considering graduate work in philosophy should elect courses in this area. Offerings may change from time to time and courses will be alternated as indicated.

PA 351 Theory of Knowledge

Discussion of major questions concerning knowledge, such as: what is involved in claims to know; how and to what extent are these claims justified in different areas. Reading material: both contemporary and otherwise, but the focus of attention will be on the problems discussed, not on historical evolution of views. (At least one course in philosophy or permission.)

Mr. Bigelow

(PA 352 Philosophy of Mind) To be offered 1973-74.

(PA 353 Philosophy of Science) To be offered 1973-74.

PA 354 Philosophy of Language

A consideration of the structure and use of language. Topics discussed will include: what a language is, language and thought, communication and the concepts of meaning and truth. Lectures and class discussions with readings in recent and contemporary sources.

Mr. Temin

Studies in the History of Philosophy

Courses numbered in the range PA 400 - 420 will cover major figures in philosophy or major movements, e.g., empiricism, rationalism, idealism, existentialism. These courses are recommended to students planning to pursue graduate work in philosophy and should normally be elected only by students who have had previous courses in philosophy.

PA 400 Readings in History of Modern Philosophy

A reading course for junior majors covering the major philosophical movements of the last 100 years: idealism, existentialism, positivism, linguistic analysis. Occasional discussion meetings and final written and/or oral examination. (Open only to philosophy majors. Required of all majors.)

Staff

PA 500 Research in Philosophy (open only to majors) (Also offered Fall 1973.)

Staff

PA 704 Senior Seminar: Contemporary Philosophy (Also offered Fall 1973.)

All seniors elect two terms of the senior seminar. The seminar is devoted to the study of contemporary figures or movements in philosophy. Students will be expected to prepare periodic research papers utilizing primary sources and journal literature.

Staff

PHYSICAL EDUCATION AND ATHLETICS

The Physical Education Program concentrates on the so-called life-time sports so that all students leave Middlebury with exposure to sports or recreational activities in which they have developed a degree of skill and interest that will be an asset to them in later years. The program consists of five seasons in essentially life-time sports, i.e., dual, individual, dance and swimming (required for those unable to pass the pool test) and a credit maximum of three seasons for participation in intercollegiate, performing groups, or instructional team sports. There are two seasons in each of the two college terms and one season in the college winter term.

Students may complete their Physical Education Program by utilizing any of the following options and opportunities:

- a. Instructional classes
- b. Approved independent programs
- c. Exemption program
- d. Any combination of the above, including a three season credit for participation in intercollegiate, performing groups, or instructional team sports.

The Physical Education Program may be completed at any time, or by any of the above options, convenient to the student during his/her four years at Middlebury - except that three exemptions or three seasons credit should be attained by the end of the Junior year to insure completion of the program. The entire program may be completed by demonstrating proficiency at or above the intermediate level in three life-time activities offered in the exemption program, provided the "Pool Test" has been passed.

The passing of one or two exemptions provides the student with one or two seasons credit toward completion of the entire program. Students may take no more than three instructional classes in the same activity nor receive more than three seasons credit for the same activity (one of which may be an exemption credit).

All registrations for instructional classes in physical education are held in the McCullough Gymnasium Office, and registrations are held prior to the start of each of the five seasons during the college year. There are three exemption periods during the year (early fall, middle winter, and late spring) and students sign up for test appointments at the McCullough Office prior to the announced exemption periods. Students should consult the appropriate department member concerning participation in inter-collegiate and performing groups. Application forms for independent programs are available at the Offices in the Field House and McCullough and are returnable, for consideration, to Prof. Colman's office in the Field House one week prior to the start of each physical education registration period. Students who wish to elect courses, (i.e., the student does not need the course for physical education credit) should register with the department for the appropriate season and they will be scheduled for classes on a space available basis.

Physical Education Program (Winter II and Spring Seasons)

Specific seasonal course offerings are available at the time of registration prior to the start of each season.

Staff

Physical Education Registration Periods: (9:00-12:00 and 1:00-4:00 at McCullough Office)

For Winter II Season - February 12, 13 and 14.

For Spring Season - March 12, 13 and 14.

Approved Independent Programs: Applications are available at the offices in McCullough and the Field House and are returnable, for consideration, to Prof. Colman's office in the Field House one week prior to the start of each physical education registration period.

Exemption Periods: (Students must sign up for test appointments at the McCullough Office prior to the start of the exemption periods.)

February 12, 13 and 14: Skiing, figure skating, dance, badminton, swimming, and pool tests.

May 14, 15 and 16: Tennis, archery, golf, canoeing, riding, dance, badminton, and pool tests.

PE 271 Dance: A Performing Art

A course involving the performing aspects of Modern Dance. It is designed to develop an appreciation for the Dance as a creative and disciplined art form and to train the students as dancers capable of effective and artistic communication. Included are Technique and Composition Classes, Repertory, Seminar, and Production. Three classes a week plus three technique classes. (Previous dance experience or permission.)

Miss Gulick

(PE 281 Dance: Interpretation in Historical Perspective) To be offered Fall 1973.

PHYSICS

The course offerings in the Department of Physics are designed to fill the needs of a liberal arts curriculum. The offerings are suitable for three categories of students: (1) Those who do not intend to specialize in science, but have an interest in science; (2) Those who desire a basic introduction to physics as an adjunct to a major in another science; and (3) Those who major in physics. Students normally major in physics as preparation for graduate study in the sciences or engineering, as preparation for a professional school, or as preparation for teaching. Students planning to major in physics should start with PH 109-110, no later than their sophomore year and preferably in their freshman year. Students with excellent secondary school training may be permitted to begin their study of physics with PH 201, PH 202 Modern Physics.

For students not specializing in science the department offers three one-term courses. PH 101 The Physical World - Energy and Stability, PH 102 The Physical World - Light, and PH 251 Introduction to Astronomy. These courses have no prerequisites and are not sequential.

Students intending to major in physics (category (3) above) will find that the department offers a full complement of both theoretical and experimental courses. The minimum requirements for a major in physics are the four term sequence of Mathematical Analysis, the four term sequence of General Physics and Modern Physics, four electives in physics, and either three term-units of Independent Study followed by general examination (three credits total), or two terms of Advanced Laboratory followed by general examination (two credits total). Specific courses to be taken by a major are determined by him in consultation with his department adviser. The department offers a program for majors of Environmental Studies with Emphasis in Physics. (See Environmental Studies.)

(PH 101 The Physical World - Energy and Stability) To be offered Fall 1973.

PH 102 The Physical World - Light

The course emphasizes the total variety of phenomena that belong under the heading of "Light." An historical view of man's understanding and use of the radiant energy spectrum - from radio waves to gamma rays - is coupled with an examination of light's fundamental role in the physical world, its wave-particle nature and constant speed. Only slight use is made of mathematics and lab sessions will concentrate on the demonstration of physical principles in natural lighting, color perception, communications, photography, lasers, x-ray and radar. Three hours lecture, three hours laboratory. (The courses PH 101 and PH 102 are not intended for science majors. They may be taken in either order.)

Mr. Wright

(PH 109 General Physics I) To be offered Fall 1973.

PH 110 General Physics II

An introductory course to electricity, magnetism, and optics. A knowledge of calculus of the level of MA 112 is assumed. The computer is used in analyzing experimental results and solving theoretical problems. Three hours lecture, three hours laboratory. (PH 109.)

Mr. Cooney

(PH 201 Modern Physics I) To be offered Fall 1973.

PH 202 Modern Physics II

An introduction to quantum physics including wave mechanics, the uncertainty principle and wave-particle duality. Application of quantum mechanics is made to simple atomic and molecular systems. Nuclear physics and the theory of solids are also introduced. Three hours lecture, one laboratory/problem session. (PH 201.) Mr. Winkler

(PH 221 Electronics) To be offered Fall 1973.

PH 251 Introduction to Astronomy

The course introduces the ideas and purposes of astronomical investigation. Some historical perspective on this most ancient of sciences serves as a background for a discussion of current theories about the solar system, stellar evolution, the galaxy, and beyond. The college observatory is used for observational work. Three hours lecture and laboratory as arranged. Mr. Winkler

(PH 301 Electromagnetic Fields) To be offered Fall 1973.

PH 302 Electromagnetic Waves

The radiation, propagation, and characteristic properties of electromagnetic waves are shown to follow from Maxwell's equations. The electromagnetic nature of light is investigated, and principles of physical optics are studied including interference, diffraction, reflection, refraction, polarization, etc. Lab experiments with microwaves and lasers are used to supplement and illustrate the lectures and problems. (PH 301 or permission.) Three hours of lecture and one laboratory/problem session.

Mr. Terwilliger

(PH 303 Intermediate Mechanics) To be offered Fall 1973.

PH 312 Methods of Theoretical Physics

The course concentrates on the methods of applied mathematics and the special functions which are commonly used in theoretical work. Topics include matrices, eigen values, complete sets of functions, complex variables, the Fourier transform, the use of Green's functions, and the calculus of variations. Problems will be drawn from several branches of physical science. Three hours of lecture. (PH 110 and MA 201.) Mr. Wright

(PH 332 Heat and Thermodynamics) To be offered Spring 1974.

(PH 401 Quantum Mechanics) To be offered Fall 1973.

(PH 402 Advanced Quantum Mechanics)

(PH 441 Advanced Laboratory I) To be offered Fall 1973.

PH 442 Advanced Laboratory II

This course allows the student to learn and use the more advanced techniques and concepts of physics by performing experiments in areas of current interest to

physicists. Relatively few experiments will be performed. For each experiment the student will do library research going to original papers when possible, will take part in the planning of the experiment and after carrying it out will present a report of his work. The two terms of Advanced Laboratory are not sequential. (PH 202.) Two three hour laboratory/problem sessions. Staff

PH 500 Research and Special Topics (Permission.) (Also offered Fall 1973.) Staff

PH 705 Independent Study (Also offered Fall 1973.)

Independent Study followed by general examination. Staff

POLITICAL SCIENCE

The major in Political Science examines the theory and practice of politics. The major program begins with a term study of politics in general, followed by a term of American or comparative politics. Intermediate level courses are offered in the major fields of the discipline. The senior program is directed toward intensive study in research seminars. Offering a selected core curriculum with a broad range of approaches to the study of politics, including philosophic, traditional, and scientific analysis, the curriculum is designed to meet the demands of modern citizenship as well as the basic preparation for graduate work or law school. Normally only courses at the 100 level are open to Freshmen.

Required for the major in Political Science: A total of ten Political Science courses, including: (1) PS 101 and either 102 or 103, (2) completion of the Senior Program, and (3) two courses in each of three of the following fields: American Political Institutions, International Politics, Comparative Politics, and Political Theory. Majors also should consult with their advisers regarding appropriate cognate courses.

Senior Program: The Senior Program normally consists of two Research Seminars, each of which includes an advanced research project. The Research Seminars are listed as the 400 level courses below. They may be taken at any time beginning with the Spring Term of the Junior year, but they must be taken during separate terms. Two course credits are granted for the Senior Program. Students admitted to the Honors Program may substitute one term of Honors work for one of the Research Seminars. Department approval also may be granted to Seniors with exceptional records who wish to substitute an Independent Project (PS 500) for one of the Research Seminars. Proposals should be submitted to the Department for approval at least one month prior to the registration period for the Senior term in which the project would be undertaken.

Honors Program: Students may become candidates for Honors in Political Science at any time after the beginning of the Spring term of the Junior year and prior to the Spring term of the Senior year. Honors projects will normally be begun in the Senior Research Seminars or 500 projects. Prior to the beginning of the Winter term of the Senior year, the Department will determine whether Senior Seminar or 500 projects are progressing satisfactorily enough to be continued as Honors projects. One course credit (PS 500) is granted for Honors work.

(PS 101 Introduction to Political Science) To be offered in Fall 1973.

PS 102 The American Political Regime

Our examination of this "first new nation" begins with the Constitutional Convention and the framers' deliberations over the best form of government consistent with the principles of the Declaration of Independence and appropriate to the people of the United States of America. Study of this and later critical moments in the interpretation and construction of the American political regime requires an examination of the writings of *The Federalist*, Jefferson, Marshall, Calhoun, Tocqueville, Lincoln, and Frederick Douglass. Next, selected basic problems in American politics are examined by means of Supreme Court cases and critical essays. Topics have included race, civil disobedience, the moral basis of international action, and higher education.

Mr. Dry and Staff

PS 103 Introduction to Comparative Politics

How do people decide their fate? The course will consider how different political systems attempt to resolve the critical problems found in all societies: the creation of a common identity, the development of effective instruments of power, the establishment of legitimate authority, and the production and distribution of goods and services.

Mr. Rosenberg

American Political Institutions

(PS 203 American Politics and Legislation) To be offered in Fall 1973.

PS 204 American Politics and Legislation

The formal and informal aspects of legislative organization and procedure; a study of political power as it is found in the legislative process and in the activities of the power groups found in American society. Closely related to current legislative proceedings.

Mr. Thurber

PS 301 State and Local Government

Institution structure and political process at the state and local level. Contemporary issues and problems facing state and local government in the American political system.

Mr. Thurber

(PS 305 American Constitutional Law: Principles and Structure) To be offered Fall 1973.

(PS 306 American Constitutional Law: Individual Rights) To be offered Spring 1974.

(PS 307 The American Presidency) To be offered Fall 1973.

International Relations

(PS 201 International Politics) To be offered Fall 1973.

PS 202 Contemporary International Politics

Major areas of conflict and cooperation in the contemporary international system. Includes an exercise in diplomatic gaming. (PS 201.)

Mr. Leng

PS 302 International Conflict Resolution

The theoretical rationale and utility of international law, international organization, and diplomacy as approaches to the resolution of contemporary conflicts. Mr. Leng

(PS 304 Theories of International Politics) To be offered in 1974-75.

(PS 311 American Foreign Policy) To be offered Fall 1973.

(PS 405 Seminar on International War) To be offered Fall 1973.

Comparative Politics

PS 322 Government and Politics of Southeast Asia

A survey of the traditional societies, the colonial impact, the nationalist revolutions, and the modernization efforts of Burma, Indonesia, the Philippines and Vietnam.

Mr. Rosenberg

(PS 330 Politics and Technology) To be offered Fall 1973.

(PS 404 Seminar on European Politics) To be offered Fall 1973.

Political Theory

(PS 317 Political Philosophy: The Classical Tradition) To be offered Fall 1973.

PS 318 Modern Political Philosophy

Close study of some classics of modern political philosophy, including works by Machiavelli, Hobbes, Locke or Spinoza, Rousseau, Hegel, Marx, and Nietzsche. Themes include the transition from natural right to natural rights, the humanist revolt against classical political philosophy, the rejection of the contemplative ideal and its replacement with various activist images of human being, self-inflicted balkanization of political philosophy and the emergence of independent and allegedly superior human studies.

Mr. Nelson

PS 331 Contemporary Political Analysis

How is politics studied today? The first part of the course will examine principles, methods, and case studies of scientific inquiry according to normative, structural, and behavioral theories. During the second part, students will design and conduct their own empirical research projects on current political issues. Mr. Rosenberg

PS 401 Representative Government

Representative government is characterized by a theoretical argument concerning consent of the governed, a doctrine of powers or functions of government, and tolerance of a variety of human pursuits. Can these elements be integrated into a coherent form of government, or must representative government be viewed in evolution, as it reflects changing human wants? This seminar will examine that question with particular emphasis on theories of governmental powers or functions, such as the separation of powers, and accounts of the purpose of representative government. Readings to include: Aristotle, Hobbes, Locke, Montesquieu, Federalist, Kant, Mill; M.J.C. Vile, Charles Beard, Gabriel Almond, Hanna Pitkin, Harvey C. Mansfield, Jr., Leo Strauss and David Lowenthal. (Permission.)

Mr. Dry

PS 409 Seminar in Political Thought: Some Twentieth Century Political Thought
The course will be divided into two parts. The shorter first part will survey the alleged decline of political philosophy in the twentieth century. The second part will take up a few contemporary writers who, in the face of or despite the difficulties facing present-day philosophizing about politics, have again attempted to practice political philosophy as rational inquiry into the nature and goods of political life. Among these writers and their main writings are Isaiah Berlin, Four Concepts of Liberty, Michael Oakeshott, Rationalism in Politics, and J. R. Lucas, The Principles of Politics. (Permission.)

Mr. Nelson

Independent Projects

PS 500 Advanced Projects in Research

A program of independent research designed to meet the individual needs of advanced students. (Permission.)

Staff

PSYCHOLOGY

For the student who majors in psychology engagement with experimental data lays the basis for an empirically-founded and objective formulation of principles of human behavior. He may encounter the data in published research reports, in his regular laboratory work, and in connection with his own research along lines that he finds important. The relevant observations may involve human subjects or sometimes infra-human subjects for the better experimental control that they may permit. Whatever the sources of his observations, the student comes to see them as products of the experiments that generated them, and thus he evaluates their importance for hypothesis or generalization.

As a psychology major the student takes a program of elective and required courses in psychology and related disciplines. By the end of his sophomore year, through work in Psychology, and in cognate fields, he has acquired familiarity with many of the data, concepts, and research procedures essential to an understanding of human behavior. During his last two years he makes use of his accumulated knowledge and skills in his deep involvement with several areas of central importance to psychology.

Students generally choose to complete as much as possible of their formal course work toward the major by the end of the junior year so that their work in psychology as seniors can be devoted to independent reading and study and possibly to individual research leading to Departmental Honors.

Required for a Major in Psychology: PY 105, PY 201, PY 205, PY 301, PY 305 and at least three additional fall or spring term courses in psychology; Qualification in Psychology; Senior Seminar (PY 704) and the General Examination in Psychology (PY 705); and completion of cognate requirements: two one term courses, chosen in light of the student's interest and with the consent of the Psychology Department, from among the courses offered in Biology, Chemistry, Mathematics, and/or Physics.

Qualification in Psychology must ordinarily be accomplished by the end of the student's sophomore year and is achieved by completion of Psychology PY 105 with a grade of at least C-, by completion of Psychology PY 201 with a grade of at least C-,

and by completion of the extra-departmental cognate requirements stated above. A student who has not met Qualification by the end of his sophomore year may be granted exception to the requirements on action of the Department in response to his written request.

Senior Program: Senior Seminar (PY 704) involves conferences with staff and preparation of several papers and presentation of these papers to a seminar during the fall and spring terms of the student's senior year. Preparation for the General Examination (PY 705), given yearly in May, will involve independent reading by the student. This preparation may be done as the equivalent of one course during the fall or winter or spring term of the student's senior year at his choice.

If the student seeks to be graduated with Departmental Honors in Psychology, he must apply to the Department before February 1 of his junior year. He will then register for Advanced Research (PY 500) during the spring term of his junior year to delimit his problem and conduct any necessary pilot or feasibility studies for his research. Upon successful conclusion of such studies he will, if he chooses, be admitted to Honors candidacy, and continue his research during his senior year as part of his work in PY 704. He may also, if he chooses, devote the Winter Term of his senior year to research. Upon successful completion of his project an Honors Examining Board will be convened to consider and make recommendation about the order of Departmental Honors to be awarded upon his graduation. These orders include Honors, High Honors, and Highest Honors in Psychology.

PY 105 Psychology: A Viewpoint (Also offered Fall 1973.)

Several important issues selected from the problems of perception, motivation, and mental illness are considered from the point of view that, for a psychologist, a satisfactory understanding of the phenomena he studies will necessarily depend on his seeing them in terms of his subject's (1) physical capabilities and limitations, (2) experiential environment, and (3) interactions with that environment. 3 hrs. lectures, 2 hrs. practicum (optional).

Staff

PY 201 Principles of Research in Behavioral Science

This course introduces the student to behavioral experimentation through a consideration of the problems relating to the design and analysis of experiments. It deals, further, with the accepted procedures for describing and reporting the outcomes of such research. (PY 102 or 105, or permission.)

Mr. Ewell

(PY 205 Experimental Psychology: Learning) To be offered Fall 1973.

PY 225 Developmental Psychology

The purpose of this course is to examine human development in terms of the principles and methods of psychology. The course will consider in turn such topics as: the nature of the developmental process, the methodology of child study, perceptual-motor development, the development of language and intellectual skills, and the development of gender role. (PY 105.) (This course will also receive credit for Teacher Education.)

Mr. Prouty

(PY 228 Personality: Normal and Abnormal) To be offered in 1974-75.

(PY 229 Social Psychology) To be offered in 1974-75.

(PY 301 Physiological Psychology) To be offered in 1973-74.

(PY 305 Experimental Psychology: Psychophysics and Scaling) To be offered Fall 1973.

(PY 314 Experimental Psychology: Sensory Processes) To be offered 1974-75.

PY 316 Research in Physiological Psychology

In this course the students explore intensively the various experimental procedures used in neuropsychological research. In laboratory they carry out a number of these procedures, observe their effects on behavior, and histologically verify their central nervous system loci. (PY 301 and permission.) 2 hrs. lecture, 3 hrs. lab.

Mr. Pellegrino

PY 322 Psychology in Clinical and Educational Contexts

This course is devoted to the procedures of recognizing, through tests and otherwise, the problems of mental retardation, brain injury, emotional disturbance, and the "bright" or "dull" child. Some consideration is given to the treatment of these problems. Students with particular interest in one type of problem will have the opportunity to explore that problem in depth. (PY 102 or 105.) (This course will also receive credit for Teacher Education.)

Mr. Ewell

(PY 326 Personality) To be offered in 1974-75.

(PY 426 Personality and Psychotherapy) To be offered Fall 1973.

PY 500 Advanced Research

A program of research arranged to meet the needs of advanced students majoring in psychology. (Permission.)

Staff

PY 704 Senior Seminar

In this program, required of senior psychology majors during Fall and Spring terms, the student with faculty guidance chooses one or a small number of topics in the literature of psychology to pursue deeply on his own. He reports to his fellow students several times on this work. Participation in this program carries one course equivalent in each of the two terms.

Staff

PY 705 General Examination in Psychology

Senior psychology majors are expected to work independently throughout the year in preparation for the General Examination given in May. This examination covers the field of psychology rather than specific course material. Each student is granted one course equivalent for preparation for this examination. He may take that equivalent, at his own choice, during the fall, winter, or spring term of his senior year.

Staff

RELIGION

The program of the Department of Religion is designed to introduce the student to various aspects of the religious experience of mankind. The courses numbered RE 200 are open to all students, including Freshmen.

A major in religion shall fulfill the following requirements: three courses numbered in the 200's, four courses numbered 300, a thesis written during the fall and winter terms of the senior year which may count for two or three course units, and two to four cognate courses approved by the department.

RE 101 Seminars in Religion (Also offered Fall 1973.)

A course organized around six week seminars which deal in depth with a particular issue or topic. The student will select two seminars at the beginning of the term from a list prepared by the department. (Limited to Freshmen only.) Staff

(RE 201 The Biblical Heritage) To be offered Fall 1973.

RE 203 Classical Issues in Religious Thought (Also offered Fall 1973.)

Classical religious and philosophical perspectives on such topics as the idea of God, the problem of evil, human freedom and destiny. This course will be offered each semester. Mr. Rockefeller

(RE 205 The Shaping of American Religious Life) To be offered Fall 1973.

(RE 206 The Religious Traditions of India) To be offered Spring 1974.

RE 207 Major Themes in the Religions of East and West (Also offered Fall 1973.)

A comparative study of the basic affirmations of selected religious traditions: Buddhism, Taoism, Hinduism, Islam, the religion of Ancient Israel, Zoroastrianism, and Ancient Near Eastern religion. Mr. Rainey

(RE 208 History of Buddhism) To be offered in 1974-75.

Studies in Religion

The following courses, limited in enrollment, may change in number and topic from year to year. They may be elected, with the permission of the instructor, by students who have not had previous courses in religion.

(RE 301 The Religious Thought of the Nineteenth Century) To be offered Fall 1973.

RE 302 The Religious Thought of the Twentieth Century

Studies in the theology and philosophy of religion of such authors as Bergson, Teilhard de Chardin, Dewey, Buber, Tillich, Wieman, Niebuhr, and Stace. Mr. Rockefeller

(RE 303 The Thought of Paul Tillich) To be offered Fall 1973.

RE 304 The Idea of God in the History of Religions

The origin of the idea of God in human consciousness and its meaning in various cultures. This course will juxtapose selected accounts of the idea of God, e.g., in primitive society, Classical Greece, the Biblical and Hindu traditions and modern interpretations.

Mr. Nuovo

(RE 306 Puritanism and Revivalism in America) To be offered Spring 1974.

(RE 308 Seminar in American Religious History) To be offered in 1974-75.

(RE 310 Seminar in Biblical Studies) To be offered Spring 1974.

(RE 311 Depth Psychology and Religion) To be offered Fall 1973.

RE 312 Images of Redemption and Fulfillment: Sacred and Profane

An examination of various images of human fulfillment in Western philosophical and religious traditions: Zarathustra, the Book of Daniel, Marx, Nietzsche, millenarian movements in the Middle Ages, More, and selected contemporary utopian writers.

Mr. Rainey

RE 500 Independent Study

RE 700 Senior Research For Honor's Candidates

RE 702 Senior Seminar: Research Topics to be selected by students with Instructor's Approval

Mr. Nuovo

RUSSIAN

The following courses taught in English by the Department of Russian are open, with the permission of the chairman of the department, to students who are majors in other departments: RU 251 and RU 252, Russian Literature and Culture; RU 351, Dostoevsky; RU 352, Tolstoy; RU 353, The Russian Short Story; and RU 354, Soviet Russian Literature.

Admission to the major program is attained through satisfactory grades in RU 202 and RU 252 or through satisfactory scores on a qualifying examination. The qualifying examination will cover all language skills and a general knowledge of Russian literature and culture from its beginnings to the present day.

Normally a major program will consist of the following courses: RU 301, RU 302 and three courses chosen from the following: RU 311, RU 312, RU 401, RU 402, RU 411, RU 412. Although all students will be expected to take work in the areas of language, literature, and civilization and culture, the program of an individual student may place greater emphasis on any of these three areas and each student's program will be planned individually in consultation with the chairman.

The senior program will consist of a Senior Seminar (the equivalent of one course), for which students will normally register in the spring semester. Students

with particularly strong records for the first three years of study will be encouraged to prepare an Honors project under the supervision of a faculty member. Upon the approval of the chairman Honors work may be substituted for the Senior Seminar.

Middlebury College is one of the institutions sponsoring a semester-long program of Russian study at Leningrad University through the Council on International Educational Exchange. Competition for this program is extremely rigorous and students should begin planning their entire undergraduate study program early if they anticipate applying for this program. Interested students should consult with the chairman as early as possible concerning this program.

(RU 101 Beginner's Russian) To be offered Fall 1973.

RU 102 Beginner's Russian

Oral inductive approach to provide a firm control of the sound system and the structure of the language. Although the emphasis is on the spoken colloquial language, reading, writing, and the fundamentals of grammar are gradually introduced in order to provide a solid foundation for work in advanced courses or for reading in specialized fields. (RU 101 or permission.) 2 hrs. lect., 3 hrs. drill sections, plus intensive use of the language laboratory.

Mr. Baker & Staff

(RU 201 Intermediate Russian) To be offered Fall 1973.

RU 202 Intermediate Russian

Continuation of the oral approach used in RU 101, 102, and 201, but with increasing emphasis on reading and writing. (RU 201 or permission.) 1 hr. lect., 3 hrs. drill sections, plus intensive use of the language laboratory.

Mr. Baker & Staf

(RU 251 Russian Literature and Culture) To be offered Fall 1973.

RU 252 Russian Literature and Culture

Continuation of survey of Russian cultural history and literature. The main emphasis will be on the literature and the culture of Soviet Russia. No knowledge of Russian is required. (Permission.)

Mr. Hopkins

(RU 301 Russian Phonetics, Diction and Conversation) To be offered Fall 1973.

RU 302 Russian Conversation and Composition

Continuation of development of oral fluency, together with review of grammar and study of some of the more intricate elements of Russian grammar. (RU 301 or permission.)

Mr. Hopkins

(RU 311 Russian Prose and Drama of the 19th Century) To be offered Fall 1973.

RU 312 Russian Prose and Drama of the 19th Century

Reading in the original of works of some of the major 19th century writers. Classroom discussions and written assignments in Russian. (RU 311 or permission.)

Mrs. Baker

RU 351 Dostoevsky (in English)

A study of the major works of one of the masters of Russian literature, who has had a great influence on world literature, particularly on the Existentialists. No knowledge of Russian is required. (Permission.)
Mr. Motolanez

(RU 352 Tolstoy (in English)) To be offered in 1974-75.

(RU 353 The Russian Short Story (in English)) To be offered in 1973-74.

(RU 354 Soviet Russian Literature (in English)) To be offered in 1975-76.

(RU 401 Advanced Language Study) To be offered in 1973-74.

RU 402 Advanced Language Study

Continued development of the spoken and written skills, including stylistic analysis of various types of material. (RU 401 or permission.)
Mrs. Baker

RU 411 Russian Prose and Drama of the Twentieth Century

Study in the original of some of the major twentieth-century writers. Classroom discussions in Russian. (RU 302 or permission.)
Staff

(RU 412 Russian Poetry) To be offered in 1974-75.

RU 500 Advanced Studies in Language and Literature

Supervised individual study for highly qualified students; including Honors Thesis.

RU 704 Senior Seminar

A consideration of selected works from Russian literature and intellectual history. Written reports and individual oral presentations in Russian. (Senior majors.)
Staff

SOCIOLOGY—ANTHROPOLOGY

Our world is one characterized by rapid social change and complex social problems. At the same time, one is increasingly aware of the impact of social relationships in producing social structures that either inhibit or facilitate desired goals.

The major in Sociology-Anthropology is designed to provide the student with a perspective for the systematic analysis and understanding of human behavior resulting from cultural and societal forces. Based on the empirical findings of the closely related disciplines of Sociology and Anthropology, this perspective is inherently comparative, such that the department is concerned with the inter-relations between culture and society in various settings. Although both of these disciplines share common concern about human behavior, each in addition has its own history, concepts, and theoretical commitments. Anthropology essentially focuses on the role of culture in human experience and Sociology is concerned primarily with the role of social interaction and the social structure in human experience.

Upon completion of the introductory courses, each major may declare a "specialization" in either Anthropology or Sociology. (This does not preclude the election of courses in both fields.) The "concentrator" in Anthropology must take one "culture area" course; the "concentrator" in Sociology must take SA 205, Sociological Theory.

All majors, regardless of specialization, must take SA 301, Research Methods. It is strongly suggested that students take this course in the junior year in order to prepare the topic and background for their Senior (or Honors) Thesis. Sophomores may register for the course if they wish. During the final year, the student will write a Senior Thesis (or Honors Thesis). Normally the two thesis units are used in the fall and winter terms. However, at the student's option, both units may be taken during the fall term, with the final copy still due at the end of the winter term.

Required for the major in Sociology-Anthropology: SA 101, SA 102, SA 301, either SA 205 or one "area course," the Senior thesis, plus a minimum of 5 but not more than 9 fall and spring courses in the Department and a minimum of one but not more than two winter courses in the Department (one of which may be part of the Senior Thesis). The selection of cognate courses will be planned with the major's adviser, taking into consideration the student's aims and purposes in the department.

Departmental Honors will be granted to those who do superior work on the senior thesis and course work in the department.

Introductory Courses

(SA 101 Introduction to Anthropology) To be offered Fall 1973.

SA 102 Sociological Perspective

A systematic introduction to the science of societal structures and processes. Major varieties of sociological thought are explored in terms of theoretical constructs, methodologies and substantive findings. After coming to understand the primary ways by which the sociologist perceives and deals with any given social phenomena, specific substantive materials dealing with a common theme will be examined in depth.

Mr. Fengler, Mr. Haerle, Mr. Nye

Theory and Method

(SA 205 Sociological Theory) To be offered in Fall 1973.

SA 301 The Research Process

Introduction to the relationship of concepts, hypotheses and theory. By means of a class research project, each student will be exposed to all phases of the research process, including research design, measurement, selected techniques (observation, participant-observation, interviews, questionnaires), statistical reasoning and testing, data analysis, and report formats. Submission of the Senior Thesis proposal. Lectures and research laboratory. Strongly recommended for juniors. (SA 101 and SA 102.)

Mr. Haerle and Staff

Social Organization and Comparative Institutions

(SA 315 Sociology of Education) To be offered Fall 1973.

SA 337 Political Sociology

The significance of family, peer group and school in the development and formation of political attitudes, identity and behavior--emphasis will be placed on the effects of age, sex, and social class. Particular attention given to the role of college youth in the political process. The significance of public opinion polls and the mass media in modern politics. (No prerequisites.) Mr. Fengler

(SA 338 Political Anthropology) To be offered in Spring 1974.

SA 345 Work, Leisure and Sport

Major focus on work as a social and organizational phenomenon from two complementary points of view: (1) the sociology of occupations and professions, stressing careers, the process of professionalization, and autonomy vs. bureaucratic structure, and (2) industrial sociology, with emphasis on alienation and the conflict of formal and informal structures. Implications of change in the meaning and organization of work for problems of leisure and sport. (SA 102 or permission.) Mr. Haerle

(SA 364 Population Studies) To be offered in 1974-75.

(SA 370 Social Inequality in Comparative Perspective) To be offered Fall 1973.

(SA 380 Anthropology of Religion) To be offered Fall 1973.

(SA 392 The Family) To be offered Fall 1973.

SA 393 Kinship and Social Organization

Examination of the concepts and methods used in the analyses of kinship and social organization in tribal and peasant societies from the theoretical perspectives of American and British anthropology. (SA 101 or permission.) Mr. McCreery

Area Studies

(SA 321 Native Peoples of North America) To be offered Fall 1973.

SA 326 Latin American Culture and Society

An examination of the features that characterize the Latin American cultural area as seen from the anthropological perspective. Although historical data will be considered, the main emphasis is on contemporary Latin America. Particular attention will be paid to urbanization, sub-cultures, social stratification and value orientations. (No prerequisites.) Mr. Andrews

SA 333 Asian Ethnology

A systematic comparison of cultural symbols and social structures in selected Asian civilizations as seen from the point of view of comparative sociology and anthropology. Focus in 1973: China, Japan and Java. (No prerequisites.) Mr. McCreery

(SA 343 American Community Studies) To be offered Fall 1973.

Social Process and Social Problems

(SA 352 Individual and Society) To be offered Fall 1973.

SA 356 Socio-cultural Change

An examination of socio-cultural change with emphasis on evolution, acculturation and the development process, using data primarily from non-Western peoples. (SA 101, SA 102 or permission.)
Mr. Andrews

(SA 359 Peasant Society and Culture) To be offered in Spring 1974.

SA 366 Majority-Minority Relations

An investigation of prejudice, race and ethnicity as institutionalized social phenomena. Other topics include the collective experiences of hyphenated Americans, the legacies of slavery and the American dilemma. The primary objective is to lend sociological intelligibility to some of the most pressing social problems of our time. Emphasis is on American society but historical and comparative approaches are employed. (SA 102 or permission.)
Mr. Nye

(SA 388 Deviance) To be offered in Spring 1974.

(SA 495 Seminar in Sociology-Anthropology) To be offered when the need arises.

SA 500 Advanced Individual Study (Also offered in Fall 1973)

(SA 700 Senior Thesis) To be offered Fall 1973 and Winter 1974)

SPANISH AND ITALIAN

Spanish

The program of study in Spanish represents a carefully coordinated sequence of instruction in language and literature. The early courses concentrate on developing fundamental language skills, after which students are introduced to the special demands of literary analysis and interpretation. In the more advanced courses, major writers and literary genres are presented in an order of gradually increasing linguistic difficulty.

Required for the major: SI 302, SI 302, plus a minimum of eight and a maximum of twelve additional courses, at least six of which must be at a higher level than SI 302. Also it is recommended that at least two additional courses be selected, in consultation with this department, from related areas such as English, American and European literatures, Art, and History. Study in a Spanish speaking country is highly encouraged for majors in good standing. Middlebury College offers a special Junior level program of Spanish studies in Madrid. For information on this and other Junior Level or summer study programs abroad, see Junior Year Abroad Program. Majors must enroll in the Seminar given in the Spring Term of their senior year. Qualified students may undertake approved independent study in their junior and senior years. Any student may select to live for one year in the Spanish House.

(SI 101 Beginning Spanish) To be offered Fall 1973.

SI 102 Beginning Spanish

For students who have successfully completed SI 101, the course emphasizes the control of basic language skills which are then used in reading and discussing short works by modern Spanish and Spanish American authors. Mr. Peel, Mr. Ilgen, Mr. Véquez

(SI 201 Grammar, Reading and Writing) To be offered Fall 1973.

SI 220 Spanish Conversation (Also offered Fall 1973.)

An intermediate course for freshmen and upperclassmen designed to perfect the student's fluency in spoken Spanish through a carefully structured program leading gradually into free conversation on topics of broad general interest. The course is based on a variety of materials, including articles from current Spanish and Spanish American magazines, film strips and other media. Regularly followed by SI 240. Mr. Véquez

SI 240 Modern Writers of the Spanish World (Also offered Fall 1973.)

An advanced language and literature course designed both to further the student's experience of Spanish and Spanish American literature and to perfect his skills in writing. The work of the course will be based on the perceptive reading of a number of outstanding prose works from the writings of such figures as Unamuno, Cela, Borges, Cortázar and Asturias. Frequent short critical essays will complement the reading and provide the student with the means of improving his ability to express himself in written Spanish. Open to qualified freshmen and upperclassmen. Followed by SI 301. Mr. Kelsey

(SI 245 Writing in Spanish) To be offered 1973-74.

SI 247 Aspects of Spanish American Culture

The course will study important aspects of the development of Spanish American culture from pre-Columbian times to the present. Representative readings from the works of pertinent writers will be supplemented by related cultural material on slides, tapes, and records. Regularly followed by SI 301. Mr. Véquez

SI 301 Literary Analysis and Interpretation in Spanish (Also offered Fall 1973.)

This course serves as an introduction to the techniques of critical analysis of Hispanic literature. It follows SI 240 and is a prerequisite for all higher courses in Spanish. Selected works of modern Spanish and Spanish American authors are studied in depth in order to develop the student's ability to read and criticize perceptively various literary forms and attitudes: poetry, novel, theater and short story. Authors read will be Bécquer, Machado, Baroja, García Lorca, Guillén, Azuela, Fuentes, Aleixandre and Hierro. Mr. Kelsey

SI 302 The Hispanic Tradition in Literature: From the Middle Ages to the Golden Age (Also offered Fall 1973.)

An introduction to the masterworks of Spanish literature from its inception to the period of its greatest flowering in the 16th and 17th centuries. Reading will include the great medieval epic of the *Cid*; the traditional ballads or *romances*; representative selections from both the *Don Quijote* and its celebrated precursor, *La Celestina*; the works of the classical Spanish poets of the Renaissance and Baroque (Garcilaso, Fray

Luis de León, San Juan de la Cruz, Lope de Vega and Góngora); the first picaresque novel, the *Lazarillo de Tormes*; and *Fuenteovejuna*, a play by Lope de Vega, the prince of the Spanish stage in its greatest period. Mr. Ilgen

(SI 310 The Modern Spanish Novel and Essay) To be offered in 1973-74.

(SI 315 Spanish Poetry of the Twentieth Century) To be offered in 1973-74.

(SI 320 The Modern Spanish American Novel and Short Story) To be offered in 1974-75.

(SI 325 The Contemporary Spanish American Novel) To be offered in 1974-75.

SI 330 Contemporary Latin American Fiction (In English)

The avant-garde, experimental nature of recent Latin American fiction will be examined in the novels and short stories of leading contemporary writers: Julio Cortázar, Alejo Carpentier, Carlos Fuentes, José Donoso, Mario Vargas Llosa, Gabriel García Márquez and others. Special attention will be given to the vigorous innovation and originality of their work, which has won for them an enthusiastic audience in Europe and North America. (Open to students in the Department but does not count towards the major in Spanish. Not open to students who have taken SI 325.) Mr. Peel

SI 340 Federico García Lorca (Readings in Spanish: Discussion in English)

A close study of the poetry, prose, and drama of García Lorca from his early lyrics of 1920 to the brilliant theater published after his tragic death at the outbreak of the Spanish Civil War. The considerations given in class to his development and achievements as one of Europe's best-known poets and playwrights will be augmented by those critical writings which have accumulated since 1936 to define and redefine his literary art as they subjectively change the objective written text. To interrelate the study of his basic poetic preoccupation with Spanish folklore, gypsy society and its problems of alienation, the surrealist themes of his New York and Cuban periods, we will further explore the influences of early American cinema and jazz, flamenco music, and contemporary Spanish painting as they affect his poetic vision. In addition to the consideration of his avant-garde theater as essentially literary experiments, there will be discussion of his best plays as "living theater" rather than as passive written scripts, with imaginative class suggestions for creative settings, lighting, music, and other problems of interpretive live productions. Recommended translations will be suggested for students who need assistance in understanding the works in the original. (After SI 301-302 or by permission.) Mr. Kelsey

(SI 410 "Don Quijote") To be offered in 1973-74.

(SI 415 Lope de Vega y la comedia española del siglo XVII) To be offered in 1974-75.

SI 420 - SI 440 Seminars: Seminars are offered in a wide range of topics, varying from year to year. They include the following: La literatura de la España medieval; Hispanoamérica: época colonial; La poesía lírica del Siglo de Oro; La tradición picaresca en la literatura española; Romanticismo, realismo y naturalismo en España; El teatro moderno en España; La poesía hispanoamericana del siglo XX; Readings in the History of the Spanish Language. The department encourages suggestions from students for other topics, and will attempt to arrange seminars for which there is sufficient interest. Plans must be made no later than the beginning of the preceding fall or spring term.

Offered in 1972-73:

SI 436 The Poetry of Pablo Neruda

A study of the major works of Spanish America's most distinguished living poet (winner of the Nobel Prize for Literature in 1971) in the context of the great variety of literary movements spanned by his extraordinary production. After considering the Modernismo and Vanguardismo of his earlier works, we will examine the period of his participation with García Lorca, Guillén, Alberti, and Aleixandre in the Generation of 1927, as well as the poetry of social protest of his later years and the calmer, autobiographical strain of his present work. Particular attention will be given to three of his best known works: Veinte poemas de amor y una canción desesperada, Residencia en la tierra, and Canto General. (Permission. Reading and discussion in Spanish.) Mr. Ilgen

SI 500 Independent Study (Also offered Fall 1973.)

The department will consider requests by qualified juniors and seniors to engage in independent work.

Italian

The major in Italian Literature and Civilization consists of three parts: courses taken on campus during the regular academic year, courses taken at the Italian Summer School, and the Junior Year program of study in Florence. The candidate must complete SI 252 or a higher level course by the end of the sophomore year. It is recommended that he take courses, offered on campus, in such related fields as Art, History and Music. At the Italian Summer School, which he will be expected to attend during the sophomore-junior summer, he will enroll in a Grammar and Composition course at the intermediate level, and he will take one literature course. During the Junior Year in Florence he will be enrolled in four courses: a course in Stylistics and one literature course (both commissioned specifically for Middlebury College), and two courses at the University of Florence, in such areas as literature, linguistics, art, and music.

(SI 151 Beginners' Italian) To be offered Fall 1973.

SI 152 Beginners' Italian

This course is devoted to a review and application of the basic principles presented during the first semester. Readings; compositions; reports; laboratory assignments. Five class meetings per week (two in lecture sections, three in drill sections).

Mr. Castiglione, Mrs. Castiglione

(SI 251 Intermediate Italian) To be offered Fall 1973.

SI 252 Advanced Italian

Reading of works by modern and contemporary Italian authors. Discussions; compositions; laboratory assignments.

Mr. Castiglione

(SI 351 Introduction to Literature) To be offered Fall 1973.

SI 352 Introduction to Literature

The aim of this course is to acquaint the student, through classroom discussions and oral reports, with the principal currents and authors of Italian literature from the 16th century to the present.

Mr. Castiglione

(SI 353 Contemporary Italian Prose) To be offered Fall 1973.

SI 354 Contemporary Italian Prose

A study of the younger generation of Italian prose writers, with emphasis on the relevance of the particular setting of their works. Authors studied will include Calvino, Sciascia, Bassani, and Ottieri.

Mrs. Castiglione

SI 550 Advanced Studies in Language and Literature (Also offered in Fall 1973.)

Mr. Castiglione

TEACHER EDUCATION PROGRAM

The Teacher Education Program offers students opportunities to study educational issues and to prepare themselves as elementary or secondary school teachers. Teacher Education is not a major. The Teacher Education Program also offers students advice on graduate and summer programs in Education.

Upon graduation, students who have completed one of the programs described below and whom the Teacher Education Committee, composed of students and members of the Faculty, judges capable of fulfilling a public school teacher's responsibilities without further external support or stimulus are automatically certified in the following states:

Alaska	Maryland	Rhode Island
California	Massachusetts	South Dakota
Connecticut	Minnesota	Utah
Delaware	New Hampshire	Vermont
Florida	New Jersey	Virginia
Hawaii	New York	Washington
Idaho	North Carolina	West Virginia
Indiana	Ohio	Wisconsin
Kentucky	Oklahoma	
Maine	Pennsylvania	

Students may also earn certification in states not listed here, and they should consult the Director of Teacher Education for advice.

In judging students for certification, the Teacher Education Committee tries to assess each candidate on his strengths and to accommodate the differences in experience and interest which distinguish students from one another. The Committee expects students normally to have undertaken the following studies:

For elementary certification (K-6):

- 1) A one-term course on the methods and materials of teaching reading and mathematics at the elementary level. (TE 305)
- 2) One term of college science, advanced placement in science, or a demonstrated lack of need for such study.
- 3) One term course in the foundations of education (description below).
- 4) An Internship, working with elementary students, to be completed prior to TE 304. (Will be required beginning with the class of 1975.) (See description below.)
- 5) Problems and Methods of Education-Elementary (TE 304) or its equivalent.
- 6) Practice Teaching-Elementary (TE 404-405).

For secondary certification (7-12):

- 1) A major or its equivalent in a discipline which coincides with a subject taught widely

in public secondary schools. The following majors do not coincide with subjects taught widely in public secondary schools; students who intend to major in these areas and to seek secondary certification should reconsider their choice of major and/or speak with Director of Teacher Education as early as possible in their college careers

American Literature
American Studies
Anthropology

Art History
Economics
Geography

Greek Religion
Philosophy Sociology
Psychology

- 2) A one term course in the foundations of education (See description below).
- 3) An Internship, working with secondary students, to be completed prior to TE 314. (Will be required beginning with the class of 1975.) (See description below.)
- 4) Problems and Methods of Education-Secondary (TE 314) or its equivalent.
- 5) Practice Teaching-Secondary (TE 414-415).

The Internship Requirement: (Freshmen, Sophomores, and Juniors)

- 1) may, but need not, be done in the Winter, and may, but need not, be done for academic credit. It must, however, be the equivalent of a Winter Term project in time and commitment, between 75 and 100 hours of work.
- 2) may, but need not, be done in an academic setting. In whatever setting it is done, it must be analogous to academic teaching in these respects:
 - a) it must be part of an organized, supervised program;
 - b) the intern must state in advance precisely what his goals are for the children he will work with;
 - c) the intern must work with children in groups;
 - d) there must be provisions for feedback from the children;
 - e) the intern must evaluate the progress of the children, and be evaluated himself by an on-site supervisor.
- 3) must be done while one is in college.

The Foundations Requirement: (Freshmen, Sophomores, and Juniors)
can be fulfilled by any of the following courses:

PY 225 Developmental Psychology (Spring) Mr. Prouty
(PY 101 or 105) (See description under Psychology)

PY 322 Psychology in Clinical and Educational Contexts (Spring) Mr. Ewell
(PY 101 or PY 105) (See description under Psychology)

HI 309 History of American Education (Spring) Mr. Stameshkin
(See description under History)

The Problems and Methods Requirement: (Juniors and Sophomores with special permission)

ID 305 Language Learning: Theory and Practice (Language majors only) (Spring)
(Also offered Fall 1973.) Mr. Paquette
(See description under Interdepartmental)

TE 304 Problems and Methods of Education - Elementary
Lectures, discussion and readings pertinent to the general background, current trends, problems and methods of contemporary elementary education. Includes observation and teacher aide work at the local elementary schools. Preferably taken Junior year.
(Permission.) Miss McGlynn

TE 305 Methods of Teaching Elementary Mathematics and Reading
First six weeks on materials and methods of elementary mathematics, last six weeks on problems encountered in the teaching of reading. (Juniors or Permission.)
Mr. Callahan and Miss McGlynn

(TE 314 Problems and Methods of Education-Secondary) To be offered Fall 1973.

The Practice Teaching Requirement: (Seniors)

TE 404-405 Practice Teaching --Elementary (K-6) (Also offered Fall 1973.)
A double course in which each student teaches daily at a single grade level in a local elementary school and, for a period of three full days, assumes responsibility for the activities of his classroom. Master teachers and college Supervisors of Student Teaching meet regularly with each student teacher to plan and evaluate his teaching. All students meet with the Supervisor of Student Teaching in a weekly seminar to study issues in elementary school teaching in light of their observations and experiences teaching in the local schools. (TE 304 and permission. Admission to TE 404-405 does not guarantee a student placement as a practice teacher, because the number of places available is determined by factors beyond the control of the College: the number of local teachers willing and competent to serve as master teachers and the number of students each term who wish to practice teach.)
Mrs. Gleason and staff

TE 414-415 Practice Teaching --Secondary (7-12) (Also offered Fall 1973.)
A double course in which, after observing classes, each student daily teaches two or three courses at local secondary schools and toward the end of the term assumes most of the duties of his master teacher for two or three days. Each student also participates in some of the co-curricular activities of his school and writes plans and evaluations of his teaching. Student teachers work under the close supervision of their master teachers and the Supervisors of Student Teaching. The principal purposes of this course are to help each student teacher develop criteria for evaluating his performance, to test his theories of teaching and learning and his ideas about the curriculum, and under the guidance of experienced teachers to begin to develop his own style of teaching. (TE 314 and permission. Admission to TE 414-415 does not guarantee a student placement as a practice teacher, because the number of places available is determined by factors beyond the control of the College: the number of local teachers willing and competent to serve as master teachers and the number of students each term who wish to teach particular subjects.)
Mrs. Thurber and Staff

TE 500 Independent Study (Also offered Fall 1973.)
Independent written work of an advanced nature on contemporary or historical aspects of primary or secondary school education. (Permission.) TE Staff

PROGRAM OF MILITARY SCIENCE

The objective of a Senior Division Army Reserve Officers' Training Corps (ROTC) unit, organized under the provisions of the National Defense Act of 1916 and amendments thereto, is to provide a program which will attract, motivate, and prepare selected students with potential to serve as commissioned officers in the Army Reserve or Regular Army. The ROTC curriculum at Middlebury College provides a flexible program of instruction designed to complement the student's civilian goal of acquiring a baccalaureate degree in a course of study of his choosing by enabling him to develop those attitudes and qualities that will facilitate transition to military service. The program includes a two-year basic course offered during the freshman and sophomore years, and a two-year advanced course offered during the junior and senior years. Credit for previous active duty military service and ROTC training will be granted in accordance with current Department of the Army regulations. Draft deferments will be provided all members of the program.

The Basic Course

A two-year basic course is available to all male students who voluntarily enroll in the freshman year. During the freshman year the course meets one period each week during the fall and spring semesters. During the sophomore year the course meets two periods each week during the fall and spring semesters. Six hours of leadership laboratory (drill) are also required each semester during both the freshman and sophomore years. Uniforms, books, arms and equipment are furnished by Department of the Army at no cost to the student.

MS 11 (Fall) and MS 12 (Spring) Freshman Basic (Military Science I)
Fall and spring semester. Fundamentals of Military Leadership and Management (one hour each week) and Leadership Laboratory (six hours each semester).

MS 21 (Fall) and MS 22 (Spring) Sophomore Basic (Military Science II)
Fall and spring semester. Applied Military Leadership and Management (two hours each week) and Leadership Laboratory (six hours each semester).

The Advanced Course

A two-year advanced course is offered to juniors who either successfully complete the basic course, served on active duty in the Armed Forces for one year, or successfully complete a six-week basic summer camp prior to their junior year of college. Members of the advanced course are selected by the DMS from students in the sophomore class who volunteer and are in one of these categories.

During the junior and senior year the course meets two periods each week during the fall and spring semester. Six hours of Leadership Laboratory are also required each semester during both the junior and senior years.

Students enrolled in the advanced course will receive a retainer allowance of \$100.00 per month. Department of the Army also purchases for each advanced course student a regulation Army Officer uniform. This is worn during leadership laboratory and is retained by the student upon his graduation.

Attendance at one advanced summer camp of six weeks duration is mandatory. During attendance the student is paid \$265.35 per month. Mileage rate is paid from home of record in Continental United States to camp and return. Students will attend camp between their junior and senior years, but deferment to the next summer may be made, for a cogent reason, when approved by the DMS.

The ROTC student is given a general military science course which does not emphasize any one branch or service. Prior to commissioning, assignment to a branch will be made based on existing Army quotas and the individual's desires and capabilities. Training is oriented primarily toward a commission in one of the combat arms--Infantry, Air Defense, Artillery, Armor, Signal Corps, or Engineer Corps. Students whose academic program has particularly qualified them may request a commission in one of the technical service branches--Chemical Corps, Ordnance, Finance, and others.

Students who enroll in the Advanced Course must agree to complete ROTC training, unless circumstances beyond their control make it impossible to do so. Students must agree to accept a commission, if it is offered, and to serve on active duty in the Army for a period of two years.

Commissioning Requirements. Once a student is enrolled in the Advanced Course, he must satisfactorily complete the following to be eligible for a commission as a Second Lieutenant: a. Education: Receive a baccalaureate degree.

b. Military Training:

- (1) Complete all military courses for the Senior Division ROTC.
- (2) Complete ROTC Advanced Summer Camp.
- (3) Be recommended for appointment by the President of the College and the Director of Military Science.

Upon successful completion of the above requirements, the student is commissioned as a Second Lieutenant, U.S. Army Reserve. Outstanding military students are eligible for a direct commission in the Regular Army upon graduation. Graduates then report to active duty within the first twelve months following their commissioning. Those who desire to attend graduate school may be deferred from active duty for the duration of their graduate study, but not to exceed 24 months. Exceptions to this policy will be granted to students pursuing advanced study in the healing arts, ministry and the legal profession.

MS 31 (Fall) and MS 32 (Spring) First Year Advanced Course (Military Science III) Fall and Spring semester. Advanced Leadership and Management (two hours each week) and Leadership Laboratory (six hours each semester).

MS 41 (Fall) and MS 42 (Spring) Second Year Advanced Course (Military Science IV) Fall and Spring semester. Theory and Dynamics of the Military Team and Military Leadership and Management (two hours each week) and Leadership Laboratory (six hours each semester).

ROTC Flight Program. This program is available to selected cadets in their senior year at no cost to the cadet. The student is given thirty-five hours of ground school and thirty-six hours of flight instruction. Successful completion of this program qualifies the individual for a Federal Aviation Agency Private Pilot's License.

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Attendance at the school or sufficient study of its work during its mandatory training attendance the student is paid \$250.00 per month. Although cash is paid from State of Oregon to Department of Defense in order that money be returned. Students will attend camp between their home and school years, but will return to the school campus only to study, for a regular reason, when approved by the State.

The ROTC student is given a general military education course which does not distinguish any one branch or service. First in understanding, development in a branch will be made based on existing Army courses and the individual's desires and capabilities. Training is oriented primarily toward a commission in one of the military arms - Infantry, Air Defense, Artillery, Armor, Signal Corps, or the other Corps. Students whose academic program has particularly qualified them may request a commission in one of the technical service branches - Chemical Corps, Engineers, Quartermaster, and others.

Students who enroll in the Advanced Course must agree to complete ROTC training, unless circumstances beyond their control make it impossible to do so. Students must agree to accept a commission, if it is offered, and to serve on active duty in the Army for a period of two years.

Commissioning Requirements. Once a student is enrolled in the Advanced Course, he must satisfactorily complete the following to be eligible for a commission as a Second Lieutenant: a. Completion ROTC Advanced Summer Course.

a. Military Training

(1) Complete all military courses for the two-year ROTC.

(2) Complete ROTC Advanced Summer Course.

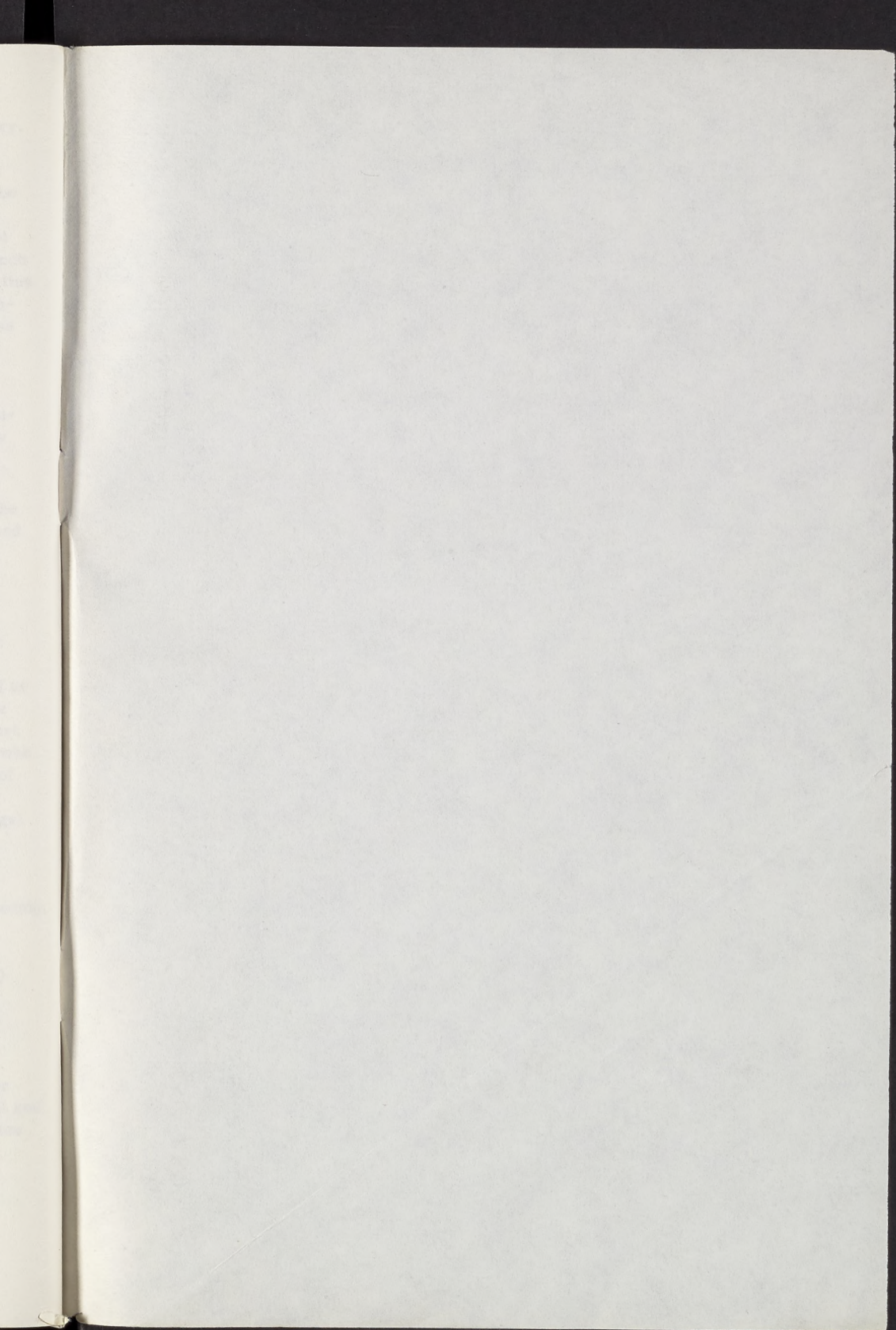
(3) Be recommended for appointment by the President of the College and the Director of Military Science.

Upon successful completion of the above requirements, the student is recommended to a Second Lieutenant, U.S. Army Reserve. Outstanding military students are eligible for a direct commission in the Regular Army upon graduation. Graduates then report to active duty within the first twelve months following their commissioning. There are certain to extend graduate report may be deferred from active duty for the duration of their graduate study, but not extended 36 months. Extension of this policy will be granted to students pursuing advanced study in the leading arts, sciences and the legal profession.

MS 31 (Fall) and MS 32 (Spring) First Year Advanced Course (Military Science III) Fall and Spring semester. Advanced Leadership and Management two hours each week and Leadership Laboratory two hours each semester.

MS 41 (Fall) and MS 42 (Spring) Second Year Advanced Course (Military Science IV) Fall and Spring semester. Theory and Dynamics of the Military Team and Military Leadership and Management (two hours each week) and Leadership Laboratory (two hours each semester).

ROTC Flight Program. This program is available to selected cadets in their senior year at no cost to the cadet. The cadet is given forty-one hours of ground school and thirty-six hours of flight instruction. Successful completion of this program qualifies the individual for a Federal Aviation Agency Private Pilot's License.



MIDDLEBURY COLLEGE BULLETIN
MIDDLEBURY, VERMONT 05753

SECOND CLASS
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AT
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